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Hegel, Institutions and Economics

Performing the social

Carsten Herrmann-Pillath and
Ivan A. Boldyrev

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To our families

Contents

List of figures xxi
Foreword xxii

Introduction 1

1 **Setting the scene: Hegel and economics** 9
Bringing the universal back in 9
Hegel's social philosophy as we (and some others) see it 12
Hegel and political economy: a very short introduction 21

2 **Hegelian principles of economics** 40
Hegel, institutions and the naturalistic turn in economics 40
Being-other as being itself: continuity thesis and institutional reality 47
Enacting spirit: performativity principle as a theoretical strategy 54
Recognition as a social bond 59
The three theses taken together – with Searle all along 63
Consequences for economic methods 67

3 **The institutional nature of economic action** 82
Hegelian metaphysics for modern brain sciences 82
Preferences, institutions and identity 94
Rethinking money in the Hegelian perspective 108

4 **Hegel, ethics and economics** 141
The performativity of political and ethical values 142
Sen's conception of 'realization-focused comparisons' 147
Smith, Hegel, Sen: family resemblances of thought 149

Functionings, capabilities as freedoms and public discourse: a Hegelian perspective 155
Realization-focused comparisons and global public discourse 165

5 Hegelian economics in a pragmatic mode: performing the economy 177
Managerial incentive systems in financial capitalism 178
Endogenous normativity of international trade policy 195

References 228
Index 255

Figures

2.1	Hegel's conception of spirit	43
2.2	The principles of Hegelian analysis	47
2.3	The revised Aoki model	71
3.1	The brain as a Bayesian machine	85
3.2	The basic structure of grounded cognition	86
3.3	Internalism, externalism and economic theories	91
3.4	The institution of money in the revised Aoki model	122
3.5	The stability of money as an institution	123
4.1	Hegelian notions of freedom and Sen's approach	157
5.1	The bimodality of incentive systems	185
5.2	Performative loops connecting academia and business	190
5.3	The associational setting of designing incentive systems	193

Foreword

This book has had a brisk and intensive genesis. The two authors met for the first time in Fall 2010, when Carsten Herrmann-Pillath (CHP) presented a paper on neurolinguistics and performativity at the Institute of Economics of the Russian Academy of Sciences. Ivan Boldyrev (IB) organized a Russian translation of the piece which was published in the leading Russian economic journal, *Voprosy Ekonomiki*. At that time, and up until 2013, CHP was working on his book *Foundations of Economic Evolution: A Treatise on the Natural Philosophy of Economics*, which builds on the philosophy of Charles Sanders Peirce to reconstruct certain basic principles of economics in a synthesis between economics and the natural sciences. The results of this work also play a prominent role in this book on Hegel. After our first meeting, IB pointed out that the notion of performativity bears close affinities with Hegel's thinking. So, CHP delved into the deep waters of Hegel's philosophy, only to recognize that this hint was extremely valuable in solving a central problem of any attempt to reconcile economics and the sciences: how to account for human creativity and moral autonomy while arguing in terms of the 'naturalization' of economics? The *Foundations* adopt a strictly positivist stance and exclude normative issues. So, our book on Hegel can be seen as a companion to this other book, and one which is absolutely necessary in order to complete the naturalization of economics as a human science, with the emphasis on 'human'.

Peirce distances himself from Hegel in several respects, but to an important extent this happens within a shared framework of discourse. Partly the differences result from the fact that Hegel was a pre-Darwinian thinker, whereas Peirce was well aware of the emergence of evolutionary theory. The most important shared ideas of the two thinkers are first, the claim that all mental activity is externalized action, and hence, second, that mind inheres in a cosmos of externalized entities that interact with human subjectivity. The latter is called 'objective spirit' by Hegel, and is identified as the universe of signs by Peirce, the founding father of both pragmatism and semiotics. These two ideas also build the bridge between the two books, devoted as they are to the metamorphosis of foundational philosophical thinking into economic reasoning.

After discovering the intellectual potential of Hegel in the context of modern economics, especially with regard to the cutting edge developments of

neuroeconomics, behavioural economics and experimental economics, we embarked upon a twofold research activity, leading to the completion of two papers which were presented at the combined conferences of the International Network for Economic Method and the European Society of the History of Economic Thought in Saint Petersburg in April 2012. Also particularly fruitful were the research meetings we had at the Frankfurt School of Finance and Management, which contributed to establishing the common ground developed in the book. We are grateful for financial support from the Federal Ministry of Education and Research in the context of the inter-university network KomPost.

The first paper (later published in *Mind and Society*) was devoted to interpreting the aforementioned economic research in terms of Hegel's philosophy, condensed into the three analytical principles of continuity, performativity and recognition. The second (later published in *Review of Social Economy*) presented an argument on how Hegel's practical philosophy may help to resolve some open issues in recent economic ethics, with particular reference to Amartya Sen. We were extremely happy that our ideas received a warm welcome at these meetings. John Davis, one of the leading scholars in economic methodology and himself an expert on Hegel, suggested that we could elaborate upon our ideas in a book. Don Ross, who was already familiar with CHP's work on Peirce, endorsed the new slant on Hegel in his ongoing conversation with CHP. When Emily Kindleysides, Routledge Commissioning Editor, expressed interest in our work, we were only too happy to launch this project, and we are grateful to these individuals who helped to ignite the fire. We also thank Springer publishers for providing permission to draw upon our *Mind and Society* publication.

What followed was an extremely intensive and exciting intellectual experience for us, with the book literally outgrowing ourselves spontaneously and swiftly, as an exemplary illustration of the dynamics of 'objective spirit'. Indeed, science is an ideational structure which unfolds itself via the limited brains of its practitioners! Looking back at the result, at the least we feel that we have demonstrated that Hegel's thinking awaits more thorough reflection in today's circumstances.

A final note on how to read the book: we have kept the argument free from detailed discussions of the pertinent literature and presentations of supporting empirical and other evidence in order to highlight the philosophical strand of thought and to help our readers to economize on time and effort. These discussions are relegated to the extensive apparatus of endnotes which therefore play an essential role in the entire architecture of the book.

Introduction

Amidst the abundance of Hegel literature, why yet another book on Hegel? This question provokes the first reservation, which we have to make at the outset and which, we hope, justifies the whole project: *this is not a book on Hegel*, even though 'Hegel' is included in its title.

However, unlike Magritte, who could stop at that, providing perhaps the cover of a book but not the book itself, we have to move further and explain in what role Hegel, both as a thinker and a sign referring to the broad intellectual tradition, appears in our narrative. Above all, we do not claim to provide a new interpretation of Hegel's philosophy. We also do not want to be considered 'Hegelians' in terms of a 'school of thought'. The book does not deal with Hegel's legacy by taking it at face value as a guide to action – whatever that could mean. In particular, we do not defend any specific philosophical theory, do not merely seek authority to strengthen some philosophical position, and do not wish to immediately 'apply' Hegel's philosophy to economics.

Rather, this is a book on *economics* inspired by Hegel and some of the subsequent Hegelian scholarship. Today's economics, which takes institutions seriously and is now in search of new theoretical perspectives, provides, as we will show, an adequate ground for accommodating Hegel's ideas.

We believe that this philosophy, as a classic product of modernity, has to be critically re-appropriated in view of both contemporary readings and Hegel's original texts. Our aim is thus not to find out what Hegel 'really' wanted to say and why, but rather *to make sense of Hegel's philosophy in the light of current economics and other human sciences and to show that this re-appropriation makes a difference in these diverse contexts*. Our reference to Hegel's texts and to the Hegel scholarship is thereby necessarily selective, but, we believe, broad enough to cover some important tendencies of the original thought and its contemporary interpretation. What 'Hegel' is supposed to mean here could be compared to a charged field, in which various ideas, insights, heuristics and figures of thought are at once present. Our project involves sorting out, appraising and re-functioning some of them, without insisting that any idea Hegel had – be it methodological or theoretical – is necessarily relevant in our context, thus without claiming to give account of the whole, without striving to be identified with some suggested picture of this whole by privatizing it and establishing still

another 'Hegelianism', and, finally, without asserting that the constellation proposed is the only possible one.

It is striking that many accounts of Hegel's social and political philosophy emphasize the role of *institutions*, but do not attempt to put this notion into the current context, in which it is, indeed, quite prominent. The point we are making in this book is that *today's economic theorizing of institutions can be decisively enriched and even transformed by embracing certain Hegelian ideas* – in terms of both method and substance. In this reformulation, many subdisciplines come into play – institutional economics, old and new, behavioural and experimental economics, some recent neuroeconomic advances and, finally, such a classical field as theory of international trade. We also draw quite extensively on the other disciplines, following the current research strategies of institutional theory, which is and has to be interdisciplinary in order to succeed: philosophy of mind and cognitive science, particularly the recent approaches to the theory of extended mind and distributed cognition (Clark 2011); philosophy of human sociality and institutions, as exemplified by John Searle (1995, 2005, 2010); performativity theory borrowed mainly, but not exclusively, from science studies and economic sociology (Barnes 1982; Callon 1998; MacKenzie 2006); some current interpretations of game theory (Binmore 1994, 1997, 2005; Davis 2011); the philosophy of identity in economics (Davis 2003, 2011); experimental economics and neuroeconomics (Smith 2003; Ross 2005); and ethical reflections on economic matters (Sen 2009). As far as economics *par excellence* is concerned, we mostly draw on the institutional perspective advanced by Aoki (2001, 2007, 2011), particularly his notion of public representations; the empirical work on preference formation such as Ariely and Norton (2007); and the theory of social preferences such as Fehr's (2009). We also provide an externalist alternative to current neuro-internalism in economics, as programmatically advanced by Glimcher (2011) and critically assessed by Ross (2012).

This dialogue across specific disciplines (which are sometimes too focused and too self-contained) complements the revival of Hegelian thinking that is itself a dialogue through time. Hegel's comprehensive philosophy thus serves as a unifying framework showing that, as diverse as these fields are, they *can* achieve coherence and be fruitfully combined. We believe that this interdisciplinary endeavour may contribute to the broader movement within both economics and other social sciences aimed at rethinking the theory of institutions and reconfiguring the conceptual landscape to date.

The consequences, among others, are that Hegel's notions of 'spirit' and 'totality' (or, to give an imprecise and purely instrumental definition, a wholeness that integrates into itself contradictory and external elements) may find their place in this new possible synthesis. Hegelian spirit, in particular, is an individual mind (subjective spirit), but also a collectivity with its world of shared practices and norms (objective spirit) and the self-consciousness of these human collectives and artefacts in art, religion, and philosophy (absolute spirit). (To be sure, the very term 'spirit' also has a distinct theological flavour, but we will not pursue Hegel's uneasy relations to religion and his theological views further

here, as his social theory gives us many methodological cues without referring to this theological background.)

Hegel's picture of society as 'objective spirit', or as spirit embodied in the social institutions and grasped as an historically evolving totality of social relations, thus being the 'truth' of subjective spirit, or individual intellect, is something seemingly alien to the current, still positivistically oriented, economic mainstream, and yet it appears to be something that glimmers at the horizon, promising to give it a new direction. The very emergence of institutions and, later, 'culture' as the main categories of economic discourse and theoretical reflection; the explicit attention to the notions of social capital and reciprocity, as well as to the ethical concerns, such as justice; and the attempts to integrate experimental research building on cognitive science and behavioural economics into institutional theory – these are the corresponding shifts characteristic of current economics.

This does not, however, amount to making Molière's Jourdains out of economists by trying to persuade them that the recent developments in institutional analysis are no more than a newly clothed Hegelianism. There are deeper implications here beyond mere analogies and affinities: to embrace Hegel's thought in economics today is to look at institutions in a new way – not just as 'rules' or 'norms', but as social entities conceived, in a pragmatist way, not as things, but as processes and activities that have to be linked to the underlying individual actions, the cognitive and neuronal phenomena, and the overall contexts of common life. These general suggestions must be complemented by more precise methodological strategies, also partly adopted by today's economists, especially those who do not want to subscribe to the narrow concept of economic rationality and seek instead to study individual actions and decision-making based on the data provided by neurophysiological research, experiments, and field studies, be it in economics, sociology, anthropology, or social studies of science.

Here and further on, as we will see, these phenomena turn out to be the moments of Hegelian totality pointing in the direction of a *new institutional synthesis* in economics. The organic unity of institutional reality, once asserted by Hegel, has to be re-assembled by drawing on the new elements and mediations, and we will sketch the basic language of this conceptual reconstruction.

Such a theoretical shift has clear practical consequences that we also discuss here at length. In the light of this Hegelian perspective on economics some important ethical controversies may find a resolution. Furthermore, we provide examples demonstrating that this perspective helps in understanding and dealing with quite mundane economic problems.

Chapter 1 provides an overview of the connections Hegel had to political economy and gives a short review of the existing literature on Hegel's economic ideas, his theory of institutions, and the general credentials of his social theory. Since the general Hegel literature is immense, we will confine ourselves to the interpretations that are most significant for our account (such as the contributions by Charles Taylor, Robert Pippin, and some others).

We draw on the most well known analysis of '*civil society*' in Hegel's *Philosophy of Right* (1821), which is indeed central to his reception of political economy. Civil society refers to the stage in the development of human sociality in which particular individual interests come to the fore, but various groups are also formed that, on the one hand, promote and embody the values and identities of the subjects involved and, on the other, provide an intersubjective foundation for the state as a more global form of objective spirit.

We show that besides extensive usage of the contemporaneous political economy arguments in his social and political philosophy, Hegel also aimed at developing a coherent account of social institutions and stressed the importance of institution-bound morals and norms for the establishment and evolution of modern individualism. This is indeed a crucial starting point for the dialogue with current economics that still professes methodological individualism. Beyond the normative support of individualism Hegel tried to delineate the social conditions that indeed make it possible as an achievement of modernity.

We further propose to shift attention away from historical contexts and to make systematic claims establishing the contemporary relevance of Hegel's thought for institutional theory. In this account, we concentrate on the role of expressive action (following Taylor) in establishing externalist structures of mind and individual intentionality, which are seen as evolving patterns in Hegel's approach to mind as spirit.

Chapter 2 argues that Hegel's theory of objective spirit anticipates many ideas characteristic of the new approaches in cognitive sciences and philosophy of mind, which adopt an *externalist* framework, in particular the theories of *social* and *distributed cognition*. The pivotal elements of Hegelian social ontology, in our view, are *continuity*, *performativity*, and *recognition*, which imply that mental processes are essentially dependent upon externalizations and that both technologies and institutions are the 'spirit' because they embody the actions of the mind. This dynamic embodiment, taken dialectically, is a performative process that actualizes the ideas and intentions of individual minds. Performative action, in turn, is impossible without mutual recognition in the intersubjective domain.

In order to act people externalize their ideas in reality, inhabit and transform this world structured as a continuum of things, signs, and ideas for pursuing their goals, and try to gain recognition from others. We contextualize our theses by drawing on the arguments developed mainly in Hegel's *Phenomenology of Spirit* and *Philosophy of Right*, including the discussions of language and civil society. Our claims are further defended against the background of Hegel scholarship. We also compare a Hegelian account with some influential conceptions of institutions, such as that of John Searle, and draw on our previous research which links the advances in neuroscience literature to the new and exciting field in the science studies and philosophy of economics, namely the analysis of performativity. We trace an interesting parallel between a theory making itself true by performing itself in reality (through technology or indoctrination), subjective spirit whose truth consists in externalizing itself and making its implicit claims

real by becoming objective spirit, and an idea of a person that could become an individual only by being put into the social context of other individuals and establishing various connections with them.

Regarding the theoretical consequences, it turns out that game-theoretic equilibria need specific cognitive, semiotic, and symbolic resources to be maintained and reproduced. These underpinnings are, in turn, determined by higher-level regularities of institutional/cultural evolution. In the resulting scheme, there is a continuum of sign systems, behavioural dispositions, strategic actions, and recurring states of play that co-determine and reinforce each other in a particular way.

Chapter 3 demonstrates the implications of the account in the previous chapter for economic theory by sketching an externalist approach to *preferences* and *money*. First, however, it draws on the neuroscience literature which shows the active character of the brain in bringing about what we consider to be the 'external' world. The externalist perspective is indeed crucial since it is only by action in the world that the individual mind can become what it is. But the materiality of this external world should be also reconceptualized in order to correspond to the mind-world continuum of self-unfolding and self-performing mentality. Hegelian considerations are thus illustrated by various findings of neuroscientists and reformulated accordingly in order to establish a connection to neuroeconomic results.

Preferences are treated as performed, intersubjectively constituted phenomena in the space of mutual recognition. We show that recent developments in neuroeconomics may be interpreted in this Hegelian mode. Individual preferences depend on an externalized system of signs, which establishes the contextualization via feedback loops that relate own actions-as-signs to publicly recognized sign systems, with preferences becoming the evolving narratives of one's self.

The Hegelian perspective helps to resolve the tension between internalism (subjective utility) and externalism (revealed preferences) in economic theory. The dependence of individual preferences upon collectively accepted stories and identities further illustrates the Hegelian point that it is persons as historically grounded and culturally embedded entities to whom genuine modern individualism refers.

Another telling example that illustrates our approach is that of money as the prominent subject in the ontology of institutions. Money is *continuous* with the mind – its effects can be traced back to neuronal and cognitive phenomena and are shown to be connected with the reality of the mental. Thus the dialectical 'truth' of some particular mental phenomena can be established with reference to money that belongs to the realm of objective spirit. Money is literally *performative*, because its efficacy is based upon declaration. Another aspect of this performative power is a specific monetary culture (analysed along the lines proposed by Georg Simmel) that actualizes, maintains and reinforces the initial idea of money as an embodied abstraction. Finally, money comes into existence only by being *recognized.* Beyond the general importance of recognition for the social ontology we focus on the role of the *state*. The summit of Hegelian recognition, the overarching structure of the objective spirit, is decisive for the institutional

stability of money. For economics this has important consequences: the non-neutrality of money can be situated within a broader theoretical context; monetary culture determining and being determined by cognitive powers of individuals and providing signs, or *public representations*, that reconstitute the social bond, becomes the key to this institutional setting; finally, the (in)stability of 'financial capitalism' can be also traced back to these mental and cultural origins of money as an institution.

Chapter 4 takes seriously the Hegelian notion of 'ethical life' (*Sittlichkeit*) as the system of institutions unifying objective norms and subjective morality, and suggests that we reconsider normative economics along the lines of Hegel's political philosophy. The main methodological suggestion here is to abandon the primordial positing of some abstract set of values that should be realized and followed. Rather, the normative realm is performative, that is normative ideals and values of rationality are immanent to the dynamics of the social. Their meaning, perceptions, and efficacy have to be systematically linked to the contexts in which they historically co-evolve with the institutional totality of objective spirit.

We explore a remarkable similarity between Hegel's critique of Kantian morality of duty and Amartya Sen's (2009) recent attack on 'transcendental institutionalism' in the theory of justice. Similar to Hegel, Sen denies the feasibility and pragmatic value of an ideal benchmark of justice. We rethink Sen's interpretation of Adam Smith's Impartial Spectator in view of recent literature that establishes a connection between the moral philosophies of Smith and Hegel. Hegel thus serves (both in terms of intellectual history and on more systematic grounds) as a 'missing link' between Smith and Sen. Hegelian insights, especially the social construction of moral norms and their historical and intersubjective embeddedness and his emphasis on associations and estates in the *Philosophy of Right*, can make Sen's focus on public discourse theoretically more concise and pragmatically feasible. As a result, we offer a new solution to the problem of reconciliation between universalistic value claims and the fact of the historicity and contextuality of human values. This solution lies precisely in the system of associations that is supposed to bring about true universality by reconciling individual interests and values and by realizing them on the higher level. Moreover, we show that modern corporations have something to learn from the Hegelian model of *Korporationen* in the *Philosophy of Right* by spelling out and promoting shared norms and identities, and thus contributing to the overall social process with their normative visions.

Chapter 5 provides a more concrete grounding for the previous chapter by considering two case studies from international economics and business ethics. The first is the problem of managerial remuneration and the design of incentive systems. Based on the recent literature on the relationship between intrinsic and extrinsic motivation, we argue that the design of incentive systems is *performative*, thus endogenizing the identities of individuals that the incentive systems target. Identities co-evolve with the concepts of finance and incentive schemes, being a part of the interpretive process, but also being influenced by the practices

of interpreting the knowledge conveyed in and by these institutional arrangements. This positive analysis depicting the entanglement of ideas, identities, norms, and their implementations is coupled with the normative implications that also inherit Hegel's ethical and political doctrine. In particular, the development of professional ethics turns out to be indispensable in dealing with the dysfunctions that emerge from these interdependencies. In view of these theoretical implications we set out to resolve the ethical problem of discrepancies between the standards of the top managers' remuneration and the common understanding of fairness – these discrepancies arousing considerable public criticism. The *ethical standards developed by managerial associations* have to define the culture of incentives and corresponding identities in the overall process of intergroup recognition. As ethical agents these associations and corporations have to mediate between the concerns and claims of various actors on the lower level of aggregation and the society at large, taking into account both industrial and professional specifics, and thus being the key elements of common ethical life. The Hegelian perspective therefore precludes the isolation and excessive decentralization of corporate relationships, taking into account the general ontological coherence of the social domain and showing that it is worth establishing these connections explicitly and endogenously, rather than waiting for the crash that exposes them in an unexpected and devastating manner.

The second case study deals with the theory of international trade. The starting point is to treat institutions as affordances, enabling rather than merely constraining trade. In this framework the free-trade doctrine, similar to that of individual freedom, is only realistic if we refer, again, to the recognitive processes among governments as the main actors of trade policy, and the different interest groups and associations struggling for influence. A more concrete suggestion would involve treating market access as a right and establishing the exchange of these rights that transforms the constraining role of the trade institutions into the enabling one via the emergent mechanisms of commitment and signalling. This implies reconciling domestic and international concerns, internalizing negative externalities, and providing equality among the negotiating parties.

We also analyse the new role of consumer values in international trade, taking the example of genetically modified organisms as a case study. Whereas the standard theories underlying the design of trade institutions only focus on producers' interests in open markets, today consumer values directly influence the design of trade institutions, leading to new forms of trade conflicts. We use the Hegelian framework to reconsider this new role for consumer interests and NGOs in international trade policy and to refute 'transcendental institutionalism' by offering more concrete and workable ethical solutions.

All in all, we believe that nowadays we are witnessing the emergence of a new economic theory of institutions. It is not something that appears as *deus ex machina*, and of course it will not be brought about by merely embracing the philosophy of Hegel, whatever rendering one might attach to it. But we believe that *today's economics has itself undergone a significant transformation*, which

has happened endogenously and partially triggered by the recent economic instabilities.

The new emerging paradigm that ineluctably makes us its own contemporaries should include the theory of institutions as a basic element. Institutions should be seen as vehicles of individual freedom, eventually making methodological individualism an outdated assumption. Institutions themselves should be treated differently, with various levels of analysis involved in concert, thus following the complex and dynamic nature of social totality. Instead of arbitrarily imposing upon various disciplines the formal calculative logic of rational choice, one should make a dialectical effort in integrating interdisciplinary perspectives on institutions and making utility maximization a 'moment' (to use Hegel's term) in the overall picture of human action and sociality. The normative implications are also far-reaching: the perfect equilibrium state of absolute justice being unattainable, we suggest dropping it altogether and instead explore the texture of the 'civil society' that would mediate preferences (existing as institutionalized minds and individual identities) with their intersubjective externalizations, such as public representations, associations, and groups. This approach, we submit, is more adequate to handle the reflexivity and performativity of the social processes.

To state it again, we need not reinvent the wheel – many ideas and instruments are already out there and are currently becoming the tools of economic analysis. But they are often scattered across the disciplines and rarely coordinated with each other or given a particular direction. If our book helps to clarify and reinforce this general movement in economics towards *culture* conceived as *objective spirit*, effectively making economic theorizing the logic and medium of actualized freedom, we will consider our project worthwhile.

1 Setting the scene

Hegel and economics

Bringing the universal back in

Economics today is one of the most developed and all-encompassing social sciences, with distinct imperialist tendencies. It not only aims at explaining phenomena in the realm of 'the economy', but also across all social domains, and even extends its ambitions to the life sciences (Noë *et al.* 2001). This is possible because economics perceives itself to be a universal logic of analysis, enshrined in mathematical formalisms, implying no particular material reference. This claim is not limited to the so-called 'mainstream' models of rationality and optimization, but also applies to 'mainstream pluralism' (Davis 2006): for example, behavioural economics may appear to correct the standard model of *homo economicus*, but may itself be interpreted as a considerable extension of the economic argument into previously unrelated areas, such as neurosciences, leading to claims that 'neuroeconomics' actually also means to apply economics in the neurosciences (Glimcher 2003). These developments very quickly turn out to imply a new, overarching paradigm seeking to integrate game-theoretic logic and various behavioural foundations of economic action supported by experimental evidence (see, for example, Gintis 2007, 2009).

This ambition to embrace the *totality* of social relations may be compared, notwithstanding some obvious reservations, to the universalistic attitude that characterized one particular philosophical project some 200 years ago, namely that of G. W. F. Hegel (1770–1831). Hegel's philosophy is one of the last comprehensive philosophical systems to retain the unity of what later became the social sciences, in particular economics, sociology, and political science. However, relatively little has been done to establish connections between Hegel's influential thinking and *economic theory* as it stands today. This is puzzling given the rise of interest in Hegel in the last two decades coming from various disciplines such as analytical philosophy (Redding 2007) or business ethics (Neschen 2008) and given the universalistic ambitions of contemporary economics, which clearly aims at acquiring the status of *the* social science.

Of course, disciplinary inertness, traditional distrust towards any 'continental', 'metaphysical', and 'speculative' theories on the part of (mainly Anglophone)

scholars in economics, ethics, or political philosophy, the seemingly outdated status of the Hegelian system, its dubious connections to Marxism[1] and, generally, a problematic relationship between Hegel's dialectics and contemporary economics aiming to be as 'scientific' as possible and to suppress any social metaphysics – all these reasons can explain this situation fairly well. The crux of our approach, however, is that both economics itself and the disciplines communicating with it (ranging from neuroscience to philosophy and ethics) are undergoing a profound transformation that might radically change intellectual priorities.

Therefore, in the twenty-first century, we might ask whether and how a bridge can be built from the nineteenth century legacy to the current situation in the social sciences which shows increasing mutual penetration, methodological openness and pluralism, and possibly a renewed effort at unification, if only due to research practice and not 'system building'.

But even if we deal only with economics, how could we make sense of Hegel given the diversity of contemporary approaches? The most obvious way would be to interpret Hegel's social philosophy as a meta-reflection grounding the inquiry in the theory of *institutions* (for a closely related view, see Testa 2011). The reason is twofold: on the one hand, modern economics is, in its deepest theoretical commitments, an institutional analysis (whatever that means for any concrete economist), and, on the other, an account of institutions is also central to Hegel's own social philosophy.

By qualifying economics as institutional analysis we do not refer to certain branches of economic theory such as the New Institutional Economics or 'institutional and evolutionary economics', but to the universal claim that what is indeed ubiquitous in the economic inquiry, including contemporary economics as a theory of social interactions, is the 'market', and that markets are institutions insofar as they presuppose certain rules of behaviour, such as property rights, rules of price setting and so forth (Plott and Smith 2008). Furthermore, we assume that institutions are *creative* – that is, that economic behaviour is not reducible to some 'natural' determinants such as neurobiological factors. Economic institutions, for example the modern corporation do not reflect any kind of 'state of nature' but are seen as autonomous creations of human rational action. Finally, the economy is interpreted as a transformative process that continuously produces new institutions, but also changes the natural conditions of human life through technology and its effects upon the human environment. In this sense, the economy becomes what Hegel called the 'second nature' of human institutions:

> But if it is simply *identical* with the actuality of individuals, the ethical [*das Sittliche*], as their general mode of behaviour, appears as *custom* [*Sitte*]; and the *habit* of the ethical appears as a *second nature* which takes the place of the original and purely natural will and is the all-pervading soul, significance, and actuality of individual existence.
>
> (PR: 195)

So, it is quite legitimate to ask whether the notion of 'institution' can build a bridge between Hegel's philosophy and today's economics. In recognizing this we also maintain that economics as an account of the 'second nature' can also be interpreted as ethics in the sense of the normative theory of action. We thus take Hegel to be relevant in terms of both positive reflection on economic (and, generally, social) institutions *and* normative concerns inside and outside the economics of institutions. While it is commonly held for economics, and for some parts of sociology, that institutions are essential for comprehending 'the social', it is also quite clear that the general strategy of understanding the nature of sociality is indispensable for any insightful work in institutional theory since the agreement on fundamentals inevitably structures any further research. Against this background, Hegel's philosophy certainly deserves serious attention, for Hegel advanced the idea that the autonomy of the modern individual – the backbone of contemporary economic theory – essentially results in and depends upon institutions and interaction with other individuals.

This idea differs from standard economics, which posits individuals as theoretical entities that are independent from markets, though not seen as 'natural' entities, and also claims that institutions are reducible to individual choices and actions. Hegel, on the contrary, argued that the very notion of 'individual' itself describes an institutional fact, referring to the 'person'. In the *Philosophy of Right* he calls the person the 'supreme achievement' (PR: 68) that marks a certain stage in the history of modern civilization and is the result of its institutional development (compare Laitinen 2011).[2] In fact, as we show, what Hegel calls the 'objective spirit' and what, according to his view, is the necessary framework of genuine individuality is precisely the institutional armature of society. So, Hegel's contribution to modern economics might rest upon his idea that individuals as free and autonomous actors are institutional – and, hence, in some sense, 'endogenous' – phenomena. We wish to pursue this idea and its ramifications in detail. Interestingly, similar ideas have recently emerged in the methodological debates about the status of neuroscience-based reductionism in economics – that is, the attempts to 'naturalize' theoretical notions such as utility. For example, Ross (2005, 2011) argues that the agents of economic theory are by no means reducible to neuroscience facts, because they are conceptual constructs in computational theories about the complex systems of markets: that is, *markets* constitute the empirical subject matter of economics, and agents in those markets are only defined relative to the pertinent reconstructions as computational systems. In this sense, *agents* in economic theory are not 'natural' entities and hence 'givens', but are *artificial products of market evolution*. We will show that these views might, in fact, be read as a (somewhat belated) tribute to Hegel.

In this chapter, we summarize the main features of Hegel's social philosophy relevant to the subsequent analysis. But since our task is not exegetical, we will restrict ourselves to a very brief discussion referring mainly to some of the established interpretations. Drawing on them helps to clarify the ideas we want to adopt and develop. Our account is surely selective: an overview of the existing

Hegel literature even in social and political philosophy would clearly reach beyond the scope of our book and, perhaps, beyond the scope of all conceivable and manageable accounts.

Hegel's social philosophy as we (and some others) see it

The institutional nature of spirit

Hegelian scholarship has recently undergone a strong revival in the Anglophone world (Beiser 2008). In some important contributions (such as Pinkard 1994 or Pippin 2008) Hegel's philosophy is seen as a continuation of the Kantian project (as he himself saw it, taking Kant's philosophy in all its dimensions to be improved and overcome; see Siep 2000: 24ff.). Kant's transcendental method famously implied the rejection of the simple subject–object relationship in the theory of knowledge. The Kantian subject gets its legislation not from some external sources, but from itself. It draws from itself the norms that structure and govern its experience, but also its free autonomous action. Fichte took over this Kantian insight and pushed it to the extreme form. For him, the free activity (*Tathandlung*) of the 'I' became the only source of objectivity and was constitutive of freedom. Here, as well as in Hegel, we find the most important structure of the idealistic argument: any grounds and reasons in both the epistemological and ethical sphere are not to be found in some other realms but within this sphere, in conscious human action. Again, this is true for the theory of knowledge: no external source of objectivity exists for spirit that 'posits' (*setzt*) the truth for itself. This is equally valid in the social realm, where only in realizing the activity can we provide an internal basis for judging it correctly – there is no other way of assessing its validity and of achieving real freedom.

The most illuminating version of this argument is presented in Hegel's treatment of spirit in the *Encyclopedia*:

> [I]t is of the very nature of spirit to be ... this process, to proceed forth from naturality [*Natürlichkeit*], immediacy, to sublate, to quit its naturality, and to come to itself, and *to free itself*, it being itself only as it comes to itself as such a product of itself; *its actuality being merely that it has made itself into what it is*.
>
> (PSS, Vol. 1: 6–7; quoted in an altered translation by Pippin 2008: 56)

That is, only spirit can make itself free by producing itself, by spelling out its own conditions and establishing its own domain which is the domain of freedom since, as Hegel famously states in the Introduction to the *Lectures on the Philosophy of History*, '[t]he substance of the spirit is freedom' (WH: 55).

The epistemological consequences of this shift were enormous. Hegel's notions of concept (*Begriff*), spirit, and their actuality became closely linked to the idea of *objectivity*.[3] German idealism could be seen as an intellectual consequence of previous philosophical efforts to establish that all human knowledge

building on arguments related to the external world is fallible. All these arguments are subject to universal scepticism. An alternative proposed by the German idealists was to reflect upon the ways in which the human mind creates knowledge about the external world. Analysing the conceptual structures of spirit, we can achieve knowledge about the world; this is a position that radicalizes idealism far beyond the Kantian view which keeps the 'Ding an sich' outside the reach of human knowledge. On the contrary, Hegel posits that the gap between mind and world can be overcome by *understanding the world as evolving structures of spirit*. Spirit in its cognitive and practical activity is not separated from 'reality' any more. As Pippin (2008: 108) states,

> the issue of objectivity, or the problem of actual content, has ceased to be an issue about the correct (clear and distinct) grasping or having of an idea or representation, and has become, most broadly, a problem of *legality*, of our being bound by a rule of some sort that prohibits us from judging otherwise.

Perhaps this emphasis on *rules* may bring closer the idea of accommodating Hegelian philosophy within various traditions of *institutional* economics: after all, it was in the now classic (and formative for the contemporary generation of economists) definition by North (1990: 3) that institutions were explicitly linked to rules.

Hegel is credited with the new insight of linking this idealistic philosophy with the socio-historical account of the development of human collectivity (Westphal 2009). The truth itself is not just an adequate account of the world out there; it should be ontologically – and hence, socially – established. The 'institutionalized' epistemological position described by Pippin and inspired in part by Brandom's (1994) pragmatism is paired with a more general account of *spirit as an institutional phenomenon*.

For a reader trained in modern economics, this starting point and some of the basic claims of Hegel's social dialectics are certainly difficult to accept, given the positivist orientation of current economic inquiry. Yet, questioning the foundations of economic knowledge can leave much space for a debate. What is 'objective' cannot ultimately be determined to be independent of the institutions or rules that guide economic research (such as the collection of data) – that is, the scientific conventions that justify the acceptance of certain 'empirical facts' in a community of scholars. Objectivity is thus essentially dependent upon this historically evolving set of institutions.

The majority of economists in the twentieth century subscribed to the standard model of individual rationality and, hence, to the axiomatic approach in dealing with the most basic explanatory principles. This model, applied and universalized by its masters such as Gary Becker in the expansion of 'economic imperialism' (Radnitzky and Bartley 1987), has often been interpreted as the standard of economic knowledge. In this process a conceptual structure differentiates itself internally by reflecting upon certain basic principles of choice under constraint and interacting with the external world. But there is no conclusive

way to establish economic 'truth' independent of this conceptual framework: *it is economics that generates the criteria of truth*, thus rendering futile any attempts at 'reducing' or 'validating' economic propositions about reality that refer to non-economic facts and theories, as in the recent debate about neuroeconomics (Gul and Pesendorfer 2008; Rubinstein 2008).[4] In our Hegel-inspired view it makes much sense to assert that economics legislates economic objectivity. This could serve as an epistemological starting point for reconsidering the Hegelian legacy in the context of modern economic science.

Hegel advanced a philosophy of the 'absolute spirit' that comes to itself in a historical process of self-articulation, with the steps taken from the 'subjective' to the 'objective spirit'. In modern terms, subjective spirit could be thought of as the process of differentiating and expressing human consciousness, and objective spirit might be treated as an evolving structure of expressions of the consciousness in cultural artefacts, i.e. the external products of human action in its social context. The spirit comes to know itself; this knowledge is identified with its freedom, understood to be the appropriation of its own norms, laws and principles within itself. The more that the world becomes the spirit's own, the more freedom it gets, and, since freedom is the essence of spirit, its historical unfolding becomes the realization of freedom (Drüe *et al.* 2000: 117f.).

As in the example of the corporation mentioned previously, the forms of human social life in modernity have become increasingly independent from any external determinants such as biological mechanisms; human individuals are free to create whatever forms of life that they wish to choose, such as gender roles that are independent from biological sex. However, these creations of human spirit are not based on arbitrary individual whims and desires, but reflect the historical evolution of communities of action, that is the structures of spirit independent from individual appropriations and uses. For Hegel, the gradual unfolding and ripening of its successive levels, on which spirit might also fail, marks the necessity of its development.

It is in transcending the limitations of nature and of the natural resolution of human conflicts, Pippin argues, that we gain an understanding of Hegel's spirit as 'a self-imposed norm, a self-legislated realm that we institute and sustain, that exists only by being instituted and sustained' (Pippin 2008: 112). Spirit for Hegel is established – or *instituted* – as a result of its own development towards freedom. It is 'an achieved form of individual and collective mindedness, and institutionally embodied recognitive relations' (Pippin 2008: 39). The realm of objective spirit is, in this account, a normative space of reasons given in favour of certain binding norms of collective social life. But Hegel understands spirit at both the individual level (as mind or subjective spirit) and the intersubjective level (as objective spirit). It is of utmost importance for us that Hegel in fact proclaims the *continuity* between various forms of spirit and that for him institutional reality is essentially a spiritual reality. Surely enough, this continuity does not imply mere physicalist causality: spirit produces and liberates itself, and this process cannot, in any plausible way, be reduced to biological or neuropsychological grounds. To act on reasons other than those given by oneself, following

some natural predispositions, for example, means to deny the status of free rational agent as it is implied by Kantian autonomy (taken up by Hegel as well). However, the very notion of the 'self' cannot be established separately from certain communities of human action, referred to by Hegel as 'people' (*Volk*). Therefore, and stated again, a free and autonomous individual cannot exist in isolation from those communities, and hence is a manifestation of the evolving structures of spirit.

There are some other features of Hegel's notion of spirit that are important for our account. Spirit is something that is realized or objectified, but it does not boil down to its various realizations; spirit should be 'living and present as a world, and only thus does the substance of spirit begin to exist as spirit' (PR: 195). Spirit is both the activity (mental and practical) and its externalizations (Quante 2008); it is not a 'thing' in the world, but rather an all-pervading historical movement. Hegel's philosophy is opposed to the idea, widespread even in most recent scientific approaches to human behaviour, that individuals are 'things', or 'brains', which cause certain observable events in the external world. Hegelian spirit simply *is* these external events in their historicity. Yet, spirit does not merely construct its actuality in an arbitrary fashion. Rather, it educates itself in a manner presented in the *Phenomenology of Spirit* as a gallery of successive transformations that allow spirit to realize itself and to comprehend historically what ways of reasoning and organizing its own reality are progressive and how to overcome unavoidable failures of implementing certain historically limited and necessarily partial principles and norms. Spirit thus combines the emergence and establishment of the new norms, since it is its formation (*Bildung*) that accounts for the adoption and rejection of those norms. Again, it is crucial here that the norms *are not given, but legislated*, not received from any external source, but taken up by spirit itself.

For Hegel,

> practical rationality, the exercise of which constitutes freedom and establishes the condition under which I can experience my deeds as truly my own, is always institution bound, that no one can be said to have any sort of effective, practical reason to do anything if conceived just as a purely rational self-determining agent.[...] This is true [...] even of universal moral obligations to all persons, since [Hegel] understands morality itself as a specific historical institution and [...] understands its normative authority developmentally, not deductively, and as delimited by the whole institutional context of which it is a part. Said another way, according to Hegel there is no 'place' to stand, putatively outside such institutions, from which one could be said to have a reason to sign up, anymore than one can be said to have a reason to move a knight or a pawn unless one is playing chess.
>
> (Pippin 2008: 263–264)

Pippin and Pinkard made an important contribution to the discussion of Hegel's practical philosophy by showing that it is the social and historical nature of spirit that allows Hegel to ground his theory of the spirit in establishing its norms for

itself. In this account of objective spirit it is straightforward to see a foundation for the theory of institutions. For Hegel, as Pippin shows, institutions matter in a way that the rational is defined as a proper following of the institutional rules. Moreover, this very rule-following constitutes the essence of the phenomenon in question. In order to be a norm/institution, something should be constructed and recognized as such.

Pippin (2001: 8) also argues that Hegel

> treats the genuinely normative claims [...] as products of a certain sort of ethical culture, as claims on others that cannot be understood or realized without there being in place a culture in which 'others' come to be understood and respected in a certain way.

In fact, in the *Philosophy of Right* Hegel criticizes the formally objective stance of abstract right and a subjective view of morality as one-sided and grounded in the intersubjective ethical life (*Sittlichkeit*). His critique is also methodological, since what he finds wrong is, first, the attempt to separate various forms of cognition and life and to think of them in an abstract way, drawing them out of the more complex system of relations, and, second, the attempt to find an overarching abstract principle that would be a priori correct and then to deduce the models of concrete social forms or normative rules from this abstraction (this debate is the focus of Chapter 4).

When Pippin talks of 'ethical culture' he could equally well talk about institutions. Nowadays we may easily recognize in the stances criticized by Hegel a lot of contemporary institutional theories. Institutions are regarded as functionally determined ways of achieving some abstract objective (e.g. maximizing utility or social welfare) or as the results of intentional actions of individuals pursuing their own aims (e.g. as equilibria in games). A Hegelian answer given by Pippin may be rendered more precise: Hegel does not adopt a deductivist perspective (that for his time can be associated with the doctrines of natural law, and today is represented by a vast array of theories dealing with some abstract criteria for institutions like social welfare or even happiness), seeking instead a *historical explanation of institutional evolution*. Hegel does not treat rationality as a norm imposed from external authority, but, in a way, as an historical progression, whereas rationality evolves together with spirit and freedom. Indeed, what is *rational* and *universal* for Hegel is not just an epistemological characterization, but also a social achievement of historically grounded and institutionally actualized forms of life:

> In opposition to the more formal, i.e. *more abstract* and hence more limited kind of right, that sphere and stage of the spirit in which the spirit has determined and actualized within itself the further moments contained in its Idea possesses a higher right, for it is the *more concrete* sphere, richer within itself and more truly universal.
>
> (PR: 59)

Hence, his approach, normative as it is, still avoids abstract normativity. Hegel always tries to present a succession of various forms in an integrative account, and he tends to be inclusive in his definitions, seeing various forms of social life as preliminary and, in that sense, necessary for the development of spirit. In other words, dialectical abstraction wants to be concrete by situating itself within a progressive movement of history:

> [W]hile Hegel's basic category theory is a theory of normativity (norms for rendering the world intelligible and for acting righteously), it is not a formal, prescriptive theory. Conceptual content is understood as fixed by actual use, so there is no 'ought/is' split.
>
> (Pippin 2008: 236)

According to Pippin, only such an approach can explain the *historicity* of norms and, we would add, *institutional change.*

Hegel thus can be made an ally in the ongoing debates on the historical nature of economic inquiry dating back to the *Methodenstreit* between Menger and Schmoller. At stake is the most fundamental issue: whether economics should be done as a 'hard' science with universalist claims and propositions valid throughout different historical and cultural contexts, or whether it should take seriously its historical situatedness and radically reconfigure its theoretical orientations (such as transforming it into an 'evolutionary science'; see Hodgson 1999). As we will show below and in Chapter 4, Hegel's dialectics, which are famously supposed to reconcile these poles of opposition in an overarching synthesis by being both historical and universal, achieve this by rethinking the notion of universality and making only historically grounded universalism matter.

This change of perspective is particularly fruitful once we acknowledge the role of economics as a science in shaping – and even legislating – what we regard as 'the economy' as an object of theoretical reflection. The tension between 'rationalist' and 'institutionalist' views of economic systems and forms of life can be resolved if we realize the many ways in which human thinking about the economy also determines the ways in which this economy works (Çalışkan and Callon 2009, 2010) and becomes a 'moment' in the totality of Hegelian *Sittlichkeit.* On the one hand, rationalistic claims point towards universal determinants of economic action as choice under constraints; on the other hand, there are normative constraints upon expression of these universal principles, and normative patterns of embeddedness of both means and ends. Social communities develop autonomous patterns of economic life which build upon mutual recognition of these norms, without at the same time invalidating universal economic principles.[5]

The primacy of action

Another major field of Hegel scholarship that we consider relevant to our discussion tries to adapt Hegelian insights to contemporary philosophy of *action* and to reconstruct Hegel's own action theory. The key figure here is, of course, Charles

Taylor (1975, 1983). The object of Taylor's critique is the causal view of action (attributed mainly to Descartes, but also more or less to the mainstream of early modern philosophy and to the contemporary philosopher Donald Davidson). In this view, actions are caused independently by desires and/or intentions.[6] These are ontologically and logically separated from the action itself. This kind of reasoning is also familiar from standard economics: choices as actions are caused by given preferences and the rational observation of constraints. We could encounter various versions of such a model both in 'mainstream' choice theory and in its recent behavioural extensions, such as theories of bounded rationality. All these theories search for 'internal causes' behind external human action.

Taylor argues that Hegel defended another, so-called qualitative perspective on action (attributed to the broader early nineteenth century tradition of 'expressivism'; see Taylor 1985), meaning that an action cannot be ontologically separated from its cause/intention and, hence, that the purpose itself cannot be fully grasped without the primary fact of action. Taylor endorses a gradualist view: by acting the agent learns more about her own intentions, desires and beliefs associated with the action. This knowledge is always already mediated by acting, which makes the whole story pragmatic and activity-centred. What is real and ontologically relevant in action is not an immediate and full awareness of the intention associated with it and its subsequent realization, but a gradual unfolding and reflective self-elucidation of activity that can qualitatively change itself. Action can be revised, substantially reconsidered, and in the course of action an agent can herself become more conscious with respect to that action.

In the economic context, we could say that all human agents are *learning* in the process of action, and that preferences must be conceptualized as *endogenous* to this process (this is what we explore in detail in Chapter 3). They cannot be simply seen as causes of action, because actions cause preferences in the course of action-mediated learning. In other words, we cannot define economic action merely as a choice of means to pursue given ends; the ends and preferences themselves only emerge and evolve within and through the action.

This pragmatic and expressive theory of action leads to further reconsideration of the basic features of mental activity. It is also comprehended pragmatically, and not in a narrow psychological way. Taylor's Hegelianism implies that we cannot even claim any privileged access to our own mental world, since the very awareness, as well as motives and desires for action, are in their genuine form results, not something pre-given and inherently clear for the agent. Expressive activity is thus primordial, with various motives, purposes and even a subject of action as its moments that are in a process of differentiating themselves within a *totality* of spirit.

The effort of self-understanding is something inherently *mediated.* Mediation (*Vermittlung*) as a key dialectical notion is understood here as being embodied in concepts and symbols, but also as 'common institutions and practices' (Taylor 1983: 32). Taylor's interpretation is, of course, directed against atomistic simplifications and emphasizes an intersubjective dimension of any action, thus corresponding to the basic ideas of Hegel's social philosophy and its recent interpretations. The action

becomes what it really is only by transforming the undifferentiated, immediate desire or intention and putting it into the social space where it needs to be *recognized* (compare Brandom 2011).

The basic model of this is language and speech: we only learn what we want to say if our utterances are mediated by the understanding of others, and we can only express what we want to say by recognizing the understanding of the other (on this parallelism, see Moyar 2008; Pippin 2008: 170ff.). In language, our thought is expressive in being a social action. This is the decisive step towards a socially oriented view of agency in which being an actor involves putting one's ideas, plans, or needs on trial and pursuing various forms of social acceptance, thereby reacting to the claims of others and limiting one's own actions by the expected and real reactions of others.

Again, we can trace this idea in economics: individual learning is impossible outside of a particular social milieu – that is, all human learning is social. This is acknowledged even in the generally individualistically oriented domains of economic research. In Becker's (1996) more recent models, the fact of social learning is reflected in the idea that actualized human preferences manifest the accumulation of human capital which is only possible in social contexts.[7]

Hegel's expressivism, therefore, cannot be understood as expressing something internally given, but rather envisages the 'sociality of reason' (Pinkard 1994). In the *Philosophy of Right*, for example, he referred to individual action in such a way that an individual end has an 'existence' in the form of 'the will of others', and action itself consists of the movement of identification between my will and the will of others to which an individual (will) has thus a 'positive relation' (PR: 139). This means that the free will of persons is only possible as a *relational fact*, and action essentially involves social categorizations of its purposes that cannot just be imposed from the internal onto the external, but emerge in the other-relatedness of all action without losing their subjective provenance:

> Action contains the following determinations: (α) it must be known by me in its externality as mine; (β) its essential relation [*Beziehung*] to the concept is one of obligation; and (γ) it has an essential relation [*Beziehung*] to the will of others.
>
> (PR: 140)

Hegel criticizes ontology that focuses on 'things' as being originators of actions or general effects.[8] The interactionist orientation of Hegel's social theory and his idea of relations as being constitutive of elements is quite relevant for our analysis. From this perspective, Hegel and modern economics share important ontological presumptions, but economists still maintain the principles of methodological individualism and social atomism in a pre-critical way, implicitly equating individuals with 'bodies' that represent sets of preferences as causes of actions. On the Hegelian view, economics would only be analytically more relevant if the preferences themselves were explained as phenomena of

social interaction. In Chapter 3 we attempt to provide this missing link along Hegelian lines.

However, this also means that we cannot explain the social by referring to the other pole in a *Ding-Ontologie* – i.e. a hypostasized society. This insight is important for evaluating another recent development – that is, the rise of economic sociology (Guillén *et al.* 2002). Economic sociology has also been influential in shaping our understanding of institutions by emphasizing the idea of the 'embeddedness' of economic action within social relationships, such as (taking a straightforward economic operationalization) social capital conceived as network structure (Dasgupta 2005). At first sight, this would introduce a top-down causal pattern running from society to individual action. However, sociology and economics may find common ground in the interactionist approaches which have developed in different shapes in sociology during recent decades. In these theories, individuals and social relations mutually constitute each other, and these interactions define both individual agency and the intersubjective patterns such as social norms, which in turn become resources to be manipulated by individuals. This perspective inherits the Hegelian insight that autonomous individuals emerge within the evolving structures of spirit.[9]

This sketchy overview of some of the issues in Hegel's social philosophy and its ramifications for today's scholarship is certainly incomplete, but it still provides some quite general principles, or, better, methodological strategies on which we will further elaborate. If, however, we reconstruct Hegel's methodological orientation in the most preliminary way, then two main issues are of importance. The first one is a clear theoretical propensity to study *institutions* in their concrete historical forms, but without regressing into mere description, as was proclaimed by subsequent generations of the German Historical school. Hegel fully recognized the importance of history, but he saw it as a structured whole, not as a chaotic flux of events. Various forms inherit one another – or, as Hegel expressed in the *Phenomenology*, it is 'a sequence in which one spirit replaced the other, and each succeeding spirit took over from the previous spirit the realm of that spirit's world' (PS: 808). *Philosophy of Right* is devoted to the process by which such concepts as will, freedom and right become institutionally embodied since it is this embodiment that eventually makes them actual.

The second issue is of negative nature. One could definitely claim that Hegel would strongly criticize methodological individualism simply because it abstracts from its own foundations. Hegel's praise of modern individualism is at the same time praise for the social relations and intersubjective structures that support and reproduce this right of subjectivity. Hence, methodologically, it is false to found social inquiry on the abstraction of individual rational agency or to reduce any social event to the interaction of elementary goal-oriented actions. Individualism is, first, an *achievement* of certain institutional forms and, second, it is both historically and systematically mediated by these forms. Put in more modern terms, Hegel refuses to postulate certain types of rational behaviour a priori, as is often done in contemporary economic analysis, but rather traces the evolution of the modern subjectivity, thus making individual rationality

endogenous and dependent in its evolution upon the whole system of modern economic and political institutions (thus preparing the intellectual ground for influential theories about 'rationalization' such as that of Max Weber; see Schluchter 1979: 23ff.).

However, Hegel did not develop an economic theory in the modern sense. Economics, as it stood in his day, played an important role in his conception of civil society, in which he tried to demonstrate the essential aspects of modern individualism. For Hegel, it was the contemporaneous political economy that was the best theoretical justification of this new bourgeois way of life. Hegel reflected on both – he had a theory of civil society and he tried to accommodate political economy as an exemplary version of such a theory, 'one of the sciences which have originated in the modern age as their element' (PR: 227). We turn to these issues now.

Hegel and political economy: a very short introduction

Hegel was not an economist; yet, at the time when he was advancing his theoretical system no clear disciplinary boundaries were available, and without professional standards (some of which remain contested nowadays) one could hardly categorize the different 'social sciences'. Before turning to the relevance of Hegel's philosophy for today's economics, it makes sense to deal with his economic ideas and to give an overview of his relations with the political economy of his time. Situating Hegel in the context of the nineteenth century political economy makes the case for dialectics in action, looking at how and why Hegel was confronted with contemporaneous economic thinking and what perspectives he tried to provide.

In fact, in disciplines such as sociology Hegel could be duly regarded as one of the most important precursors. In economics, the Hegelian impact is mostly perceived through the lens of Marxism and hence seen as totally obsolete. However, this interpretation fails to recognize Hegel as a seminal thinker concerned with the role of the state in modern economic systems while maintaining the liberal approach to competition and markets. Hegel's social theory for the liberal market society is based on the idea that markets need to be grounded in relationships of mutual recognition, particularly the recognition of human labour (we will return to the principle of recognition in Chapter 2). In this context the 'social market' could be seen as a market in which all individuals enjoy access to work and therefore mutual recognition. Hegel was among the first to establish the central relevance of full employment for modern economic systems, thus defining a *leitmotiv* of twentieth century economic debates. This emphasis on employment policy may have been borrowed by Hegel from Sir James Steuart (Waszek 1988: 188; Harris 1983: 59).

Needs, division of labour and Hegel's version of the 'invisible hand'

It is common knowledge that Hegel was fascinated by the science of political economy as practiced by Steuart and Adam Smith. As Waszek (1988: 20) rightly

claims, Hegel's task was to create a unifying paradigm using the results of various emerging social sciences (including the British political economy and the German *Staatskunst*), whereas Smith and Adam Ferguson were moral philosophers who developed economic arguments as an extension and concretization of their philosophical doctrines. The new science of political economy had been already developed by the time that Hegel began his career, and what he did was to reinterpret the results in light of his own ethics and political philosophy. In fact, Hegel was not the only one of his generation of intellectuals to be seriously preoccupied with economic issues. But unlike Fichte, Adam Müller and Novalis, Hegel was ready to appreciate Adam Smith's system of economic liberty.

Georg Lukács (1975), himself an important Marxist philosopher of the previous century, was among the first to draw attention to Hegel's interest in political economy, claiming that this reception was crucial for understanding Hegel's theoretical development. In Hegel's early notion of labour Lukács, following Marx, saw the principle of dialectical realism that transforms the external world without producing an empty and negative abstraction. In Lukács's interpretation, the realistic element in the concept of labour means that a man frees himself from natural immediacy by recognizing the external world of things as something to be reckoned with. But Lukács always emphasizes the difference between Hegel and Marx and stresses Hegel's inability to grasp the whole of the capitalist relations due to the economic backwardness of Germany during Hegel's time. The same backwardness, a lack of relevant contexts, accounts for the fact that Hegel never created a developed economic theory – in Lukács's view, he just did not have a relevant object of inquiry before him.

But Hegel's universal mind was extremely receptive to the new ideas, including the science of political economy. In 1799, as his first biographer Rosenkranz (1844: 86) testifies, he read Steuart's *Principles* and wrote an extensive commentary. His acquaintance with Smith should have happened around the same time period, but the first reference to Smith is in *Jenaer Realphilosophie* (Waszek 1988: 128f.; for further discussion of Hegel's relationship to Smith, see Chapter 4). In his Jena period Hegel developed an account of machinery, its relation to labour and the problem of alienation stemming from technical progress and the division of labour. Based mainly on Scottish authors, Hegel advanced the concepts of *need* and *labour* that he used in discussing the economic organization of bourgeois society. Following the Scots, Hegel introduced the idea of the development and refinement of needs and of social labour that is distributed among the members of society, linked together by the system of needs and dependencies and realizing their products through exchange. Hegel also showed how the network of dependencies triggered by the multiplication of needs (along with the general progress of society) and realized in the division of labour is further stipulated and reinforced by this development, which creates new needs and contributes to the general sophistication of the social structure (Waszek 1988: 213f.). In fact, we may interpret a concept of need in terms of preferences – a notion which is closer to modern microeconomics – because, for Hegel,

subjective needs are something which characterize the micro-level of analysis and distinguish autonomous rational agents of civil society from each other, implying a certain heterogeneity (Greer 1999). When defining political economy as 'the science which begins with the above viewpoints [needs and labour as means to satisfy them] but must go on to explain mass relationships and mass movements' (PR: 227) Hegel apparently meant the bottom-up movement from individual particularity to the macroeconomic vision of the aggregates developed in classical political economy.

Hegel's notion of 'needs' is related to his vision of freedom and autonomy. The 'system of needs' in civil society cannot be reduced to a set of biologically determined functions, but is socially constructed as the realm of human freedom of choice. This reflects his general approach to the will, which he analyses in terms of the triad 'universal-particular-individual' (see Quante 2011: 264ff.). Neither can the will be deduced from purely abstract principles, nor from particulars such as biologically given drives. The will achieves genuine individuality as freedom only in the mediation between the universal and the particular in social contexts, establishing needs as categories of social action which are mutually recognized by individuals who thereby assert their freedom (Neuhouser 2008). Individualization and abstraction of needs go hand in hand, since needs are constrained by the needs of others, thus pointing towards the institutionalization of the expressions and realization of needs (Schnädelbach 2000: 274ff.). In this sense, *all preferences are cultural phenomena* (and hence, contra standard economics, not just expressions of abstract subjectivity which, in the dialectical view, would count as mere arbitrariness). For Hegel, having diverse needs is a hallmark of humanity:

> The ways and means by which the *animal* can satisfy its needs are limited in scope, and its needs are likewise limited. Though sharing this dependence, the *human being* is at the same time able to transcend it and to show his universality, first by *multiplying* his needs and means [of satisfying them], and secondly by *dividing* and *differentiating* the concrete need into individual parts and aspects which then become different needs, *particularized* and hence *more abstract.*
>
> (PR: 228)

This methodological holism is also characteristic of Hegel's approach to legal categories such as 'property' and 'contract'. The individual as an embodiment of the free disposal of her property already remains in a web of contractual relations which determine her expression of freedom. The situation of isolated possession is considered to be inferior unless a person enters into (contractual) relations of property with others.

Hegel conceives of needs as normative notions and expressions of ethical life. The reason for this is that the cultural nature of needs is mediated by the division of labour, hence the necessity to realize the fulfilment of needs both through own labour and the labour of others. This is why Hegel assigns a central role to labour

in his theory of civil society and introduces his idea of the 'right to work'. Human work is a process of *Bildung* which enables the active participation in ethical life that shapes the evolution of needs fulfilled in the division of labour. Both needs and labour are coordinated by evolving conceptual structures which are inherently normative, and therefore creative, i.e. constitutive of human freedom in determining ends, and not only choosing means. The individual freedom in expressing needs presupposes their embeddedness in the communities of action.

> Needs and means, as existing in reality [*als reelles Dasein*], become a *being* [*Sein*] for *others* by whose needs and work their satisfaction is mutually conditioned. That abstraction which becomes a quality of both needs and means ... also becomes a determination of the mutual relations ... between individuals. This universality, as the *quality of being recognized*, is the moment which makes isolated and abstract needs, means, and modes of satisfaction into *concrete*, i.e. *social* ones.
>
> (PR: 229)

Hegel goes on to link this social mediation with *universality*:

> The fact that I have to fit in with other people brings the form of universality into play at this point. I acquire my means of satisfaction from others and must accordingly accept their opinions. But at the same time, I am compelled to produce means whereby others can be satisfied. Thus, the one plays into the hands of the other and is connected with it. To this extent, everything particular ... takes on a social character; in the manner of dress and times of meals, there are certain conventions which one must accept, for in such matters, it is not worth the trouble to seek to display one's own insight, and it is wisest to act as others do.
>
> (PR: 230)

Finally, he makes a decisive step in putting his account into the context of the classical narrative and thus unambiguously associating civil society with the division of labour, and invisible hand:

> In this dependence and reciprocity of work and the satisfaction of needs, *subjective selfishness* turns into a *contribution towards the satisfaction of the needs of everyone else*. By a dialectical movement, the particular is mediated by the universal so that each individual, in earning, producing, and enjoying on his own account ... thereby earns and produces for the enjoyment of others.
>
> (PR: 233)

In a complex division of labour we have to coordinate the expression of our needs with the patterns of mutual recognition mediated by market exchange.

Apart from other things, this entails the formation of abstract categories: for example, if I want to satisfy my need for drinking beer, this requires coordination between me and other consumers and producers through the formation of a concept of 'beer', defined by normative commitments and expectations about certain qualities, tastes and other standards. This differs from a state in which consumption and production fall together in subsistence economies without division of labour. So, our need for something 'beer-like' is mediated and sublimed by cultural and social constructs, and even the very notion of 'beer-likeness' is ultimately dependent upon this cultural framework. In this sense, all needs are social needs.

In the *Phenomenology of Spirit* Hegel is even more explicit in restating an invisible-hand argument:

> [W]ealth is ... in any case a universal spiritual essence; it is the *result* which is continuously *coming to be*, and it is equally the *work* and the *activities of all*. In this way, it is ... brought to dissolution within everyone's *consumption* of it. In consumption, individuality comes to be ... as an *individual*. However, this consumption itself is the result of the universal activity in the way that it reciprocally engenders both universal work and everyone's consumption, and the *actual* has the utterly spiritual significance of being immediately universal ... [E]ach individual undoubtedly thinks he is acting *in his own interest*, since it is the moment in which he gives himself the consciousness of being for himself, and for that very reason he does not take it to be something spiritual. Yet even viewed merely externally, it is evident that in his own consumption, each indulges everyone else and that in his labour each likewise works for everyone else as well as for himself, and in turn everyone else works for him. His *being-for-itself* is thus in itself *universal*, and self-interest is merely something fancied that cannot even come close to making actual what it means to do, namely, to do something that would not be to the benefit of all.
>
> (PS: 493)

Thus if I tried to act self-interestedly on purpose, I still could not escape this universal social determination that transforms my action and changes its initial meaning. Even if I strive to express my individuality through idiosyncratic tastes, I cannot define my distinctiveness independently of the social categories I have to recognize in order to be able to recognize my own distinctiveness (for a classic modern take on this, see Baudrillard 1970).

In the civil society considered as a transitional stage in establishing the totality of ethical life within the body politic of the state, needs would appear to be without limits due to human creativity and imagination. This appears to be one of the main reasons for the general decay and social injustice in the modern world, embodied for Hegel in unbounded luxury consumption. In the context of ethical life needs are normatively regulated and coordinated, mainly by corporations which also represent the division of labour. For example, the luxury

consumption of successful business people might be constrained by norms of thrift that are shared in their communities, families regulate the individual consumption of their members in consideration of the needs of future generations, and so forth.

Institutional framework of modern society: associations and estates

The account of 'civil society' and the 'system of needs' in the *Philosophy of Right* is often referred to as *the* Hegelian economic analysis. Adam Smith and his notion of the division of labour was the main inspiration behind this image of bourgeois society populated by self-interested rational agents. However, as many studies document, Hegel was also influenced by Steuart and his account of the role of the state, as well as by such critics of classical political economy as Simond de Sismondi and Thomas Malthus. These intellectual origins are readily discernible in many concrete institutional features of the Hegelian liberal market society model, beyond the abstract notions that we have scrutinized so far.[10]

Priddat, whose 1990 book gathered material on Hegel's economic thought from all conceivable sources, including lectures and students' notes, nicely reconstructs the picture of the economy that prevailed in Hegel's writings. He shares a rather well established view of Hegel's political philosophy as a kind of modern Aristotelianism. A specific meaning attributed to this perspective in an economic context refers to the embeddedness of the economy in a more general social and political sphere. Another issue pertains to the difference between Smith's emphasis on natural laws (which made him a 'Newton' of social science) and Steuart's activist policy perspectives. Hegel, as Harris (1983) noted, was interested not primarily in the workings of social mechanism, but rather in the organic and plastic social whole and its inherent 'potentialities of good life' (54) that make it susceptible to change and can be used in order to promote Hegel's ideal of ethical life. Methodologically it means that any economic argument is inscribed into a more general philosophical and *legal* context. In fact, as we have seen, certain legal institutions (such as private property and contract law) are always already presupposed by Hegel when he talks about the economic structure of civil society in his *Philosophy of Right*.

In particular, Hegel shows how the autonomy of free competition and unrestrained technical progress (also driven by competitive forces) without any institutional binding may lead to overproduction, crises, unemployment and eventually to poverty. In his early work Hegel also stressed the negative consequences of the ubiquitous introduction of machinery which mechanizes human action and makes it dependent upon technical development. Such an account of alienation may be quite plausibly characterized as proto-Marxist (Harris 1983: 49), although Hegel was not radical enough to prophesy an imminent overthrow of existing power. The excessive luxurious consumption of the rich (reducing productive investment and hence creating unemployment) along with the impoverishment of the poor are the main economic threats to the stability of modern society which need to be challenged. Otherwise, Hegel's argument goes, the rich

in their greediness and acquisitiveness, in their unrestrained *pleonexia* that does harm to the ethical order, may concentrate too much power in their own hands and make the poor jealous and envious, thereby aggravating the *rabble's* tendencies to rebel and redistribute the wealth in a simple and, for Hegel, clearly irrational way.

Hence, any economic activity should be based on legal and ethical considerations, and the central of these, as Priddat (1990) convincingly shows, is *the right to be employed.* The right to work is the most important politico-economic aspect which Hegel adds to the classic liberal property rights story. Hegel's approach, however, certainly does not support the pools of the unemployed maintained by social safety measures, but rather emphasizes (following the protestant tradition of his times) the state of work as the desired one, for the reasons above-mentioned: only by actively partaking in the division of labour could we maintain the sustainability conditions of the ethical life.

As for the economic policy perspective, the following remark from the *Philosophy of Right* is crucial: '[T]he freedom of trade should not be such as to prejudice the general good' (PR: 263) The 'police' – or, as in Ver Eecke (2008: 34), 'public authority' – is the institution that, along with providing public goods ('street-lighting, bridge-building, the pricing of daily necessities, and public health': PR: 262), oversees the compliance with the rules that keeps the competition fair and neutralizes its destructive tendencies. It does not control behaviour directly, dealing only with the rules of the game.[11] This is important not only with respect to this particular question, but also as a general feature of Hegel's vision of the social world. The main target of ethical reflection must not be the behaviour of an isolated individual, but rather the whole system of institutions that should provide the foundation of ethical life. This system, however, should not be simply a distributive one since the violent equalization of incomes may harm social welfare.

At the same time – and this is seen by many Hegel scholars as an important achievement of German idealistic philosophy – *individual freedom* as an accomplishment of modernity was fully recognized and positioned as a prerequisite of the system. Not only Smith's economic autonomy, but, in a far more general way, individual autonomy as it was promoted in the philosophies of Kant and Fichte became a cornerstone of Hegel's social and political thinking. In more concrete terms, that was stated as a principle of subjectivity and self-determination cultivated by civil society (*Philosophy of Right*: § 187).

But still, as stated in §§ 149–150 of the *Philosophy of Right*, for Hegel the way to achieve real freedom was an *institutional embeddedness of individual agency*. This implies liberating the self from natural drives as well as from abstract moral subjectivity and actualizing the free social life by objectively engaging oneself in its institutions. The main institutional form that is of interest for economics is an *association*[12] that, as lucidly shown by Waszek and Priddat who refer to various sources, serves Hegel as an institutional solution to the problem of unemployment and poverty.

If we try to state the function of Hegelian associations in terms of modern economics it seems quite plausible to look at them as *promoting the norms of*

cooperative behaviour. The mechanisms of sustaining this behaviour are connected to the general role of honour and mutual support (§ 253) that is formulated as a *recognition* on the part of a larger community. Complementing Smith's unintended consequences model of invisible hand, Hegel proposes the conscious fulfilment of one's duty as a microfoundation for the sustainable socio-economic structure of *Sittlichkeit* (§ 150):

> The proper significance of the Estates is that it is through them that the state enters into the subjective consciousness of the people, and that the people begins to participate in the state.
>
> (PR: 342)

The Estates (*Stände*) give a necessary structure to the agents, thus also providing a necessary micro-macro mediation (§ 202ff., § 302). For Hegel, the key feature of Estates is the specific ethical identity, or *ethos*, similar to the virtues of a profession. Identifying the Estates with certain ethical principles allows Hegel to formulate conceptual differences in terms of his ethical reasoning and to move beyond narrow economic arguments. Rather, he envisions some notion of cultural identity and a common way of life – categories hardly susceptible to rigorous analysis in the sense of modern economics, but indispensable for understanding any significant social process.

It is through the mediation of Estates that an individual finds her duty fully identical with her right (§ 260). The ethical harmony of Estates is preferred to the chaotic movements of a civil society governed by the mechanics of self-interest. This normative stance is expressed, quite typically for Hegel, in a developmental way: one stage is higher and represents the truth of another. In terms that are more specific for contemporary economics, Hegel seems to claim that the cooperative aspect of human behaviour is the foundation for a non-cooperative, competitive one. One can pursue one's ends only by being tied to the general institutional milieu formed by estates, associations, and, finally, constitutional monarchy as the state governed by the rule of law. These higher forms of ethical life are referred to in the modern reception of Hegel as the institutional framework of the economy.

Today, the notion of three Estates may appear to be one of the most explicit manifestations of what Lukács saw as the economic backwardness of Germany in Hegel's time. Hegel distinguishes between the three Estates of farmers, civic business and public employees (in modern terms). This division also reflects his general style of building arguments in a triadic form: the farmers represent the 'substantial' estate, the bourgeois the 'reflective' and the public servants the 'universal' estate; all of these represent states of universal ethical life in civil society. Hegel associates Estates with certain generalized roles of groups in the economy, thus in some way anticipating the ideas of historical materialism (Waszek 1988: 171; Schnädelbach 2000: 267). Yet, his criteria for distinguishing the Estates do not correspond to any existing notion of classes (PR: §§ 202–205). In his view, the first Estate is mainly seen as a traditional way of

exploiting nature, thus focusing primarily on the family and provision for sustainability. The second, acquisitive Estate is 'reflective' in the sense of producing economic benefits only by means of interaction, negating the immediate contact with productive forces. The Third Estate is 'universal' in that its representatives focus their action on the public, universal interest. Although at first sight this distinction appears to be anachronistic, a second thought reveals close resemblances with the evolutionary transition from agricultural to industrial society, the corresponding divergence between traditional and modern economic systems mainly differing in terms of innovative forces, the emergence of the modern nation state in the nineteenth century and its transformation into the welfare states of the twentieth century.

However, in a modern reception one would rather emphasize the role of associations in mediating the ethical life in Hegel's account of civil society. This is legitimate because for Hegel *all* Estates participate in the ethical life, and the institutional framework of associations for the second Estate – the bourgeoisie – may claim universality if we apply a Hegelian perspective to the modern economy.

The association is any cooperative entity made up of individuals having common purposes (Neschen 2013). Associations adapt individual interests and are more easily recognized by self-interested agents as embodiments of universal values. '[T]he corporation in and for itself is not an enclosed guild' (PR: 273; we would render Hegel's *Korporation* as *association*, see footnote 12); it is open to the dynamics of bourgeois society but complements it in a decisive way. The main functions of associations are 'to protect its members against particular contingencies, and to educate others so as to make them eligible for membership' (PR: 271).

The role of associations in establishing a micro–macro link is nicely presented by Anderson (2001), whose claim is that Hegel's associations were conceived as institutions tackling macroeconomic problems of unemployment and poverty in a bottom-up way by regulating the number of employees in certain industries, but also by promoting responsible consumer behaviour that would put an end to the impoverishment of individuals employed in certain professions.[13] The responsibility for the universal, higher dimension of the economy on the micro-level is something Hegel calls *rational*. The advance of rationality is *Bildung* – the cultural formation that leads the individual to abandon his particularity, to move beyond mere egoistic motivations and to be able to see others' wills and interests as well as the universality of mutual dependencies. The activity enacting this realization is *work* within the normative frames of associations:

> [I]n providing for himself, the individual ... in civil society is also acting for others. But this unconscious necessity is not enough; only in the corporation does it become a knowing and thinking [part of] ethical life.
>
> (PR: 273)

Associations train the communal spirit and thus mediate microeconomic concerns with macroeconomic considerations, being themselves integrated into overarching structures of the state.

Interpreting Hegel's economics

There are different ways to make sense of the Hegelian approach in the modern context. Ver Eecke (2008) tried to systematically reinterpret Hegel's philosophy in order to defend some specific views on economic liberalism and the ethical functions of the economy. He showed that for Hegel the economic order was a specific institutional arrangement aimed, among other issues, at educating individuals to be real subjects. Family and economic institutions are thus seen as the spheres situated between the principle of subjectivity and political life, between individual autonomy and universality. The market institutions of civil society as a mediating device allow individuals to educate themselves and to become socialized by expressing their self-interest and realizing their subjective aims, while satisfying the needs of others.

According to Ver Eecke, the crucial link between Hegel and economics is Richard Musgrave's concept of *merit goods*, i.e. the goods that 'the government considers so meritorious that it has the right to judge whether or not the level of production and consumption provided by the free market is acceptable' (Ver Eecke 2008: 66). Ver Eecke's argument is based on Hegel's critique of civil society as unable to fulfil its tasks and to guarantee any certainty to its citizens. The problem is a well known contingency of market forces whose 'dangerous convulsions' (PR: 262) should be moderated, and the incompatibility of various charity initiatives with the principles of civil society (PR: § 245). From that, Ver Eecke derives the claim that the state has to actively intervene as a support for the civil society, and makes this more concrete by appealing to the concept of the merit good that Hegel did not have. However, this notion is used not only to indicate the way of government intervention, but also to stress the importance of meaningful support instead of the discretionary redistribution policies that trigger resentment in modern democracies.

The failure of the market to provide its own sustainability is implied by Hegel's more general perspective on the ethical deficiencies of civil society in separation from the larger framework of the state. On the one hand, civil society represents an essential step in the development of ethical life by establishing abstract principles of social interaction, represented by the shared concepts of valuation and recognition of individual freedom and autonomy. On the other hand, civil society cannot resolve the tension between the universal and the particular by itself: universal and abstract ethical principles are combined with particular claims on individuality which remain arbitrary and can easily be captured by greed, universal hostility and lack of responsibility, thus manifesting 'a spectacle of extravagance and misery as well as of the physical and ethical corruption common to both' (PR: 222).To put Hegel's perspective into the language of modern economics, as long as we only superimpose the abstract principles of individualism and rationality onto the pure notion of subjective preferences, it is impossible to provide a full justification of any ethical principles and normative commitments, as has been shown in the long-standing debates over social choice dilemmas and paradoxes (Sen 2002).

As we will see in Chapters 4 and 5, Hegel's economic ideas per se may be helpful in various contexts of contemporary ethical discussions. For now we can state that, in his political economy, Hegel was interested in the development of institutional forms (such as family, associations and state) and – much more than that – in their *stability*. The forms are stable precisely because of being institutionalized, integrated within the structures of ethical life and thus collectively recognized. These relations and their stability are reinterpreted in terms of dialectical logic and discussed as necessary *mediations* between various concepts (and their realizations).

Another important feature of Hegelian political economy is its individualistic orientation. In spite of his emphasis on associations, Hegel was not a corporatist: he never thought that a collective entity could replace individually-centred aspirations. What he tried to show was, again, the necessity of mediation between the individual and the collective dimensions of the social, established through the idea of individuality that is constituted by its institutional context. An absence of mediation would be equivalent to despotism and arbitrariness, indicating the neglect of dialectical bonds and the destruction of speculative relations.

The institutions of civil society culminate in the state. Only in the modern state does individual freedom find its full expression, and it is with this idea that the account of the state starts in the *Philosophy of Right*:

> The state is the actuality of the ethical Idea.... It has its immediate existence ... in *custom* and its mediate existence in the *self-consciousness* of the individual ... in the individual's knowledge and activity, just as self-consciousness, by virtue of its disposition, has its *substantial freedom* in the state as its essence, its end, and the product of its activity.
>
> (PR: 275)

The idea of the modern state, Hegel argues further,

> allows the principle of subjectivity to attain fulfilment in the *self-sufficient extreme* of personal particularity, while at the same time *bringing it back to substantial unity.*
>
> (PR: 282)

This observation is essential to refute one of the most common criticisms directed at Hegel in the liberal tradition, as represented by Popper's views, which are well known among many economists. These criticisms associate Hegel with Prussian state-centred ideologies and accuse him of being the mastermind of twentieth century totalitarianism. Though it is evident from Hegel's biography that he tried to avoid association with the revolutionaries of his time (see the detailed discussion in Schnädelbach 2000: 168ff., 327ff.), we cannot evict him from the liberal tradition, as is clearly recognized even by staunchly liberal writers such as Fukuyama (1992). In Hegel's view of constitutional monarchy,

the Sovereign merely represents the general will of the people governed by the legal order and emerging from an argumentative process within the Estates:

> [T]he Estates stand between the government at large on the one hand and the people in their division into particular spheres and individuals ... on the other. Their determination requires that they should embody in equal measure both the *sense* and *disposition* of the *state* and *government* and the interests of particular circles and individuals.... [T]hey ... ensur[e] on the one hand that the power of the sovereign does not appear as an isolated *extreme* – and hence simply as an arbitrary power of domination – and on the other, that the particular interests of communities, corporations, and individuals ... do not become isolated either.
>
> (PR: 342)

The sovereign crystallizes into a pure decision-making institution underwritten by the authority of the state (the 'I will') which expresses the freedom as constituted by the structures of the state as the unifying body politic (PR: § 280, Add.). Therefore, Hegel's idea of monarchy appears to be a formal principle, the content of which emerges from the development of civil society. Although we certainly would not subscribe to this idea today, we cannot conclude that this conception is illiberal or even totalitarian. Hegel's monarch is as bound to the rule of law, and he is seen as a consummating figure of the public debate inscribed in the totality of the ethical life.[14]

In Quante's (2011: 253ff.) account of the debates triggered by Popper's assessment of Hegel, a distinction is made between 'individualism' and 'holism' as methodological and ontological principles; on the normative level, Popper, amongst many others, claimed that any kind of holism falls prey to anti-democratic normative presumptions, such that democracy, human rights and other notions can only be based on individualism. A similar idea provides a foundation for some familiar economic principles, such as consumer sovereignty. However, as Quante shows, if one distinguishes between individual and higher-level social entities, as well as between the intrinsic properties of certain entities (such as preferences of individuals) and holistic properties (such as irreducible regularities of their interactions), one can further distinguish between two kinds of holism – horizontal and vertical – depending on whether one combines the idea of irreducible properties of interactions with the existence of higher-level entities. Against this background Quante argues that Hegel combines 'vertical holism' (i.e. the claim that higher-level entities exist) with 'liberal communitarianism'.

The state as supra-individual entity emerges from the world history (*Weltgeschichte*). States depend upon mutual recognition by other states, and this is how we can explain their status as political entities that stand above the civil society. Civil society only allows for the emergence of self-interested actions in politics, whereas it is the state that ultimately represents the norms of ethical life. *Weltgeschichte* manifests the unfolding of Spirit, and only it will judge the superiority

of certain forms of state. Hegel attacks any kind of abstract constitutionalism while recognizing that the constitution plays a pivotal role in the evolution of the state. He rejects rational design of constitutions, thus concurring with the arch-liberal Hayek: Hegel's constitutions are Hayek's 'kosmos' as opposed to 'taxis' by human design. Hegel also objects to any attempt to contain state power by means of the separation of powers which commits the failure to state the powers as autonomous, instead of constituting the unity of the state.[15]

To conclude: we hope that it is sufficiently clear from our account that the primary concern for Hegel was to develop a broad perspective on the institutions of modern society and to find a place for individual agency embodying the right of modern subjectivity in the ethical order:

> Individuals, as citizens of this state, are *private persons* who have their own interest as their end. Since this end is mediated through the universal, which thus *appears* to the individuals as a *means*, they can attain their end only in so far as they themselves determine their knowledge, volition, and action in a universal way and make themselves *links* in the chain of this *continuum*.
> (PR: 224)

This problem of reconciliation and *Bildung*, of linking individuals to the totality of institutional order, is posed by Hegel in both positive and normative terms. On the positive side, he demonstrates how the structures of objective spirit develop and what is their rational organization; on the normative side, never fully separated from the positive description, modern institutions are seen as an achievement of Western civilization in its progress towards freedom and something that should become an essential possession of individuals.

In what follows we will try to further substantiate Hegel's insights and reformulate them in the context of contemporary discussions in institutional economics and related fields. This does not amount to simplifying Hegel in order to adapt his 'real' or 'authentic' position to some narrow instrumental aims of particular disciplines. On the contrary, we would claim that both Hegel and current economics should become subject to profound reinterpretation – and, eventually, change – in order to be compatible. But we believe that their possible congruence is not the end in itself, but rather an essential part of their respective histories. In fact, this convergence has already begun, and our task is to provide some evidence in favour of this.

Hence, in subsequent chapters we will refer not only to Hegel, but also to the set of ideas that could be loosely labelled 'Hegelianism' and which present a combination of Hegel's original conceptions and their interpretations in the secondary literature (concentrating on the recent contributions informed by modern analytical philosophy and the philosophy of economics and the social sciences). This is unavoidable in any book on Hegel, be it mainly exegetic or speculative, but since we will go far in elaborating on the perspectives and heuristics of Hegel's thought, we would like to stress once more a necessary distinction between critical appropriation and interpretive efforts, however tightly linked

they may be to each other. What we take from Hegel's texts and from some of the interpretations is the methodological guidance that, as will be demonstrated below, is relevant both in terms of theory and policy.

Notes

1 In fact, it was mainly Marx and his followers who tried to reformulate Hegel's thinking and adapt dialectical concepts to social and economic analysis. When universalistic principles were being adopted in economics, reference to Hegel was already becoming anachronistic in the German context over the course of the nineteenth century. In 1874, Roscher noted that Hegel had no direct impact on German economic thought, but was influential in shaping its focus on the role of government in the economy (Priddat 1990: 16). In the twentieth century, specifically German traditions in economic analysis, such as the Ordo-liberalism of the 'Freiburg' school, did not refer to Hegel, presumably because of the dominance of Marxist interpretations. In Germany, this opposition was particularly highlighted in the post-1968 intellectual climate, especially in the philosophical debates between the 'Frankfurt School' and the 'Critical rationalists' following the intellectual traditions of Popper (see, for example, Albert's 1968 explicit criticism of the German intellectual scene as being shaped by Hegel and Heidegger). Critical rationalism was seen as a natural companion to economics, whereas Hegel's legacy in the Frankfurt School seemed to support more left-wing – though not necessarily Marxist – positions. This view was bolstered by Popper's (1945) verdict on Hegel as one of the spiritual leaders of deterministic and totalitarian thinking about world history.

2 Below we will be dealing with persons as institutional phenomena. Note, however, that in Hegel's original terminology in the *Philosophy of Right* a 'person' is a legal category of 'abstract right' and as such should be overcome in the transition to 'morality' with its concept of a 'subject' who takes responsibility for its autonomous and self-conscious action. We do not adopt Hegel's own concept here, but rather deal with persons as free subjects in the institutional realm of ethical life (a practice corresponding to recent scholarship relating Hegel to modern philosophy and social thought). At stake, therefore, is the microeconomic dimension – the dimension of individual action in the overarching institutional context of objective spirit.

3 Cf. the account in the *Science of Logic*:

> [T]he Concept as such is not yet complete, but must rise to the idea which alone is the unity of the Concept and reality; and this must be shown in the sequel to be the spontaneous outcome of the nature of the Concept itself. For the reality that the Concept gives itself must not be received by it as something external but must, in accordance with the requirement of a science, be derived from the Concept itself.
>
> (SL: 587, quoted in Pippin 2008: 101)

For Hegel, individual objects only exist as manifestations of concepts that are developed in their relations to other concepts. Concepts are not abstractions over reality created by human beings, but make up this reality in its truth. This is because concepts embody the relationships of mutual truth conditions, established by lawful reasons (see also endnote 8). Correspondingly, concepts are not 'subjective' in being objects of individual consciousness, but they are the essence of consciousness unfolding into the structures of spirit, thus constituting the unity of subjectivity and world (Drüe *et al.* 2000: 118ff.). Therefore, in the notion of 'concept' Hegel expresses the unity of subject and object, as conventionally distinguished, especially by Kant (thus, Stern 2008 characterizes Hegel's idealism as 'conceptual realism'). One important

consequence of this view is to approach concepts as dynamic phenomena, which is what Hegelian dialectics is about.

4 There is a vast array of methodological contributions to economics at the interface between economic methodology and philosophy of science that we cannot reasonably survey here in order to lend further support to this view (for a summary of the field, see Hausman 2013). One possible position is Sneed and Stegmüller's 'New Structuralism' (Stegmüller 1986), which was received in economic methodology by Hausman (1992). New Structuralism drew the philosophical consequences from the clash between claims that there are universal principles of science which apply across all scientific disciplines and define the essence of what is 'science' as opposed to other forms of human activity (most articulately presented by Popper 1935) and relativistic accounts that emphasize historical context and the incommensurability of different disciplines and research programs. New Structuralism reconciles these two views in showing how scientific theories determine sets of observational languages which already rely on theoretical terms from these theories to become empirically operational, such as the magnitudes of 'mass' and 'force' in Newtonian mechanics. Similarly, central economic terms such as 'price' are theoretical and acquire meaning only in the context of the theory. As a result, different scientific disciplines develop their own standards of empirical validity and truth which do not converge to some unified and general standards of science. A similar case for pluralism is provided by Dow (2002). See also Mäki (2009).

5 This tension between two views on the economy can be nicely illustrated by the unresolved debate about the causes that led to the abolition of slavery in the Western world (McNeill and McNeill 2003: 252ff.). Purely economic explanations are still confronted by those emphasizing cultural change and the driving force of moral and political principles. In a classic comment, North (1990: 84ff.) argued that the abolition cannot be explained by changing relative factor costs per se (as a purely economic explanation would proceed), for the perception of these is mediated by 'mental constructs'; at the same time, he states that the relative prices of voicing beliefs and ideologies mattered in the ideological victory of abolitionists. From the Hegelian perspective, the confrontation between purely economic explanations and ideational ones is not necessary, as economic explanations cannot be adopted merely from the viewpoint of an external observer, based on universally commensurable measures of costs and benefits. Both economic and moral principles are reasons for action that only become binding due to the mutual recognition of actors in given historical communities. In the Hegelian view, standard economic arguments, which emphasize the role of relative prices and labour costs in driving the abolition, are radically incomplete, particularly if this is seen as the competition between two institutional regimes (forced labour and labour markets), only on the grounds of the respective cost structures (that is, costs of subsistence versus wage costs). Yet merely highlighting moral grounds does not suffice either. The point is that it is the evolution of the modern economy in the context of civil society that requires the mutual recognition of human beings as persons, and therefore puts limits on slavery. The development of markets as cultures means that certain universal forms of ethical life emerge in which slavery is no longer possible in the context of the freedom of spirit.

6 It is important to recognize the difference between Hegel's views and the main focus of recent philosophy of mind, which can be best illustrated by Davidson's attempt at reconciling causal and intentional explanations of action in his 'anomalous monism'; see Davidson 1970/2006: 23ff. and 105ff., and Yoo 2009). This will be taken up in Chapter 3 when we discuss the relationship between internalism and externalism in economic theory. Recent philosophy of mind concentrates on the question of whether there are 'mental phenomena' such as intentions that are ontologically separate from physical explanations of actions such as referring to neuronal states of the brain. Davidson's position is called 'anomalous' because it does not deny that intentions are also

physical states, but maintains their autonomous role as causes of actions. Most established positions in contemporary philosophy of mind adopt the position that there are only physical causes of actions, with mental categories only weakly supervening on physical states, at best (for more clear-cut positions in this regard, see Dennett 1991 or Kim 2009). Hegel's approach looks at these matters from an entirely different angle, namely posing the question whether actions and intentions can be approached as 'cause' and 'effect'. Then, the issue of whether causes are 'mental' or 'physical' appears to be secondary, since what matters is the generic causal framework which leads to the separation of internal causes for actions, whether intentions or physical features of the brain (at Hegel's times, the skull). So, his views necessarily lead to a radical rethinking of the mind/body problem and hence the ontological issue of substance. If only actions achieve the status of 'spirit', they are simultaneously 'physical', because they happen in the real world, and 'mental', because they cannot be reduced to states of brains. Hence, the Hegelian view can also contribute fresh insights for modern philosophy of mind, where, unfortunately, Hegel is almost entirely neglected (for example, in the voluminous *Oxford Handbook of Philosophy of Mind*, Hegel is mentioned only in passing in the single entry on 'idealism'; see Robinson 2009).

7 Then, a problem, if not a paradox, emerges in envisaging the autonomous individual as choosing between alternative future paths of developing the capacities to prefer certain choices over others: how can we determine today the relative costs or benefits of choosing between different kinds of red wine or green tea, considering the alternative tastes that we can only acquire after a long period of learning? How is it possible to simultaneously allocate time to these alternative tracks of learning if the very process changes the initial preferences? In his discussion of the Becker approach, Davis (2003) has convincingly demonstrated that Becker fails to provide stable conditions for maintaining the identity of actors through time and in distinction to other actors; stable identity, however, is the necessary condition for applying the standard conception of utility in economics in terms of stable preference functions. Sobel (2005) has shown that this is even manifest in a mathematical correspondence between the Becker utility function and functions that include social or interdependent preferences. Social preferences imply that there is a weak separation between different individuals, hence a lack of autonomous individualistic foundations for their identity, in the sense of Davis (2010: 200ff.). Note that this argument differs from the simple idea that individual learning happens in social contexts, such as in economic social learning theories. These theories still maintain the conception of the rational economic agent choosing between different items of information that are accessible in the social environment, mainly on probabilistic grounds, such as in theories of informational cascades (Bikchandhani *et al.* 1998). However, the Becker approach to preferences that includes the formation of human capital enabling the formation of particular preferences implies that there is an *interdependence* between the social structures undergirding this formation and the individual actor who cannot assume an external position relative to these structures. After all, the child cannot choose its parents, and it cannot evaluate the future consequences of current education.

8 Instead, using the notion of 'force' as an elementary concept Hegel developed a field-theoretic ontology that he even applied to his interpretation of Newtonian mechanics. In this view, it is the relationships that constitute the unity of an object which would otherwise fall apart conceptually into a fragmented bundle of properties (Westphal 2009: 15ff.). This ontological position is based on 'logical' analysis in the Hegelian sense – that is, a reflection upon the foundational concepts: then, a 'thing' can only be conceived as existing in being reason for the existence of others (Drüe *et al.* 2000: 113). Relations are thus ontologically prior because even the most general concepts (such as space) can only be defined meaningfully if they refer to relations between different points in space; these points cannot be identified independently of those

relations (see Halper 2008). In his criticism of Newton, therefore, Hegel places much emphasis on the role of gravitation, which he sees as a relational property. In other words, Hegel came quite close to the field-theoretic view later adopted by modern economics after the import of physical concepts (compare the discussion in Mirowski 1989: 66ff. and Potts 2000: 11ff.).

9 Interactionist approaches to sociology have emerged early in different shapes, such as in George Herbert Mead's pragmatist tradition (decisively influenced by the Hegelian thinker Josiah Royce), in Norbert Elias' 'figurational sociology', or Irving Goffman's research into social encounters, as well as more recently in Barnes' (1995) theories about the role of symbolic interaction in constituting societies or 'relational sociology' (Emirbayer 1997). In his methodological reflections, Elias (1969a: XLIIIff.; 1969b: 45ff.) argued that social theory is endogenous to the forms of social interactions. Thus, the Western idea of an autonomous individual, the *homo clausus*, reflects social practices even in mundane fields, such as eating habits, by which individuals came to perceive themselves as separate from others. Externalized action patterns may be responsible for the emergence of certain ideologies and even scientific methodologies. For our argument in the next section, Barnes (1995) is of particular interest as an example of a recent sociological theory of symbolically mediated interactions in which self-referential knowledge structures undergird patterns of interactions driven by individual agency constituted by those very patterns. In particular, Barnes argues that symbolic communication determines the self-perceptions of actors and therefore overcomes the problems of collective action in human societies that cannot be resolved by individualist and functionalist accounts.

10 On Steuart's influence see also Chamley 1963 and Caboret 1999. The question is of importance because Steuart was a proponent of government interventionism, thus apparently leaving a strong anti-liberal mark on Hegel's economic views. In this context, Priddat (1990) argues that Hegel's thinking does not yet reflect the advances of political economy already embodied in the theories of Adam Smith, particularly with regard to the theory of accumulation and growth. The merit of Waszek (1988) was to show, based on the widest textual evidence possible, how differentiated these influences in fact were and how erroneous are the wholesale characteristics of various economists (such as 'Smith as an uncompromised adherent of the free market' or 'Steuart as an undiscriminating admirer of the powerful state or the wise statesman') and their impacts. Waszek offers a much more reasonable view, avoiding the extremes of interpretation and, on balance, making the case for a 'liberal' Hegel (although one could distinguish between Hegel's economic liberalism and his rejection of political liberalism, as Greer 1999 does). In sum, we could characterize Hegel as a 'social liberal', as he clearly puts the individual and personal freedom at the centre of his notion of the state, but also emphasizes an activist social policy (compare Drüe *et al.* 2000: 309). Neschen (2008) makes the point that Hegel's reception of the different political economists was never intended to be a reception of their economic thinking, but was always a moment of ethical reflection (cf. Ver Eecke's 2008 interpretive 'ontological' claim that economy is a part of the 'ethical order'). Then, as we will explain in Chapter 4, the market is not primarily seen as an economic phenomenon, but as an institutional system which embodies basic Hegelian principles such as the mutual recognition of individuals. This idea emerged only gradually in Hegel's thinking, as Neschen shows in much detail. In his early writings, Hegel clearly emphasized the critical view of markets, although he never was a real revolutionary even in his youth, as was stated (with some regret) by Lukács (1975). However, Harris (1983) goes so far as to claim that in his critique of markets Hegel laid down the basis for abolishing the labour market altogether and for establishing factor cooperatives. A strong tendency towards solidarity and cooperation is clearly discernible in Hegel's economic views, yet in his mature philosophy markets became a conceptual model of civil society.

11 There are also more specific concerns to be added, such as the coordination between consumers and producers through public regulation. This leaves a substantial role for the state in the shape of its public administration. Hegel's view of the liberal economy thus includes the regulatory state in very mundane contexts such as the need for standardization and product safety:

> The right to regulate individual matters in this way (e.g. by deciding the value of the commonest necessities of life) is based on the fact that, when commodities in completely universal everyday use are publicly marketed, they are offered not so much to a particular individual ... as such, as to the individual in a universal sense, i.e. to the public.
>
> (PR: 262)

12 Hegel uses the German term *Korporation*, which is often translated as 'corporation' even though many commentators also tend to use the more general term 'associations' when referring to the entire set of 'corporations' that Hegel is actually referring to, which might include, for example, guild-like professional associations or local communities (for example, Fukuyama 1992: 322ff.). We decided to use the more general term 'association' to cover these different types of corporations, because in Chapter 4 we consider the 'modern corporation' as a specific form of associational cooperation. Using the term 'corporation' can be easily misunderstood in different disciplinary contexts (such as 'corporatism' in political science). In the context of economics, the distinction between 'associations' as a generic form of institutionalized cooperation and the 'corporation' as the legal form of modern firms ('incorporation') seems reasonable.

13 Hegel's suggested solution to the poverty problem is discussed at length by various authors because it is one of the few cases in which Hegel's account of economic policy is explicit and extensive enough to see the details of his position (see also Wartenberg 1981). Priddat (1990) argues that Hegel cannot offer an economic solution to the problem because he is lacking modern conceptions of growth and capital formation, thus ending up with various ways of managing of overproduction. Therefore, Hegel either refers to normative 'equilibration' of supply and demand by associations which not only regulate labour but which also have an ethical function (in particular, regulating and constraining luxury consumption so that it has direct positive effects upon demand for labour), or considers the alternative of emigration, thus relieving the population pressure.

14 We should, however, admit that Hegel had strong reservations against any attempt to ground the legitimacy of the state and its government in direct suffrage and any other process of determining a majority opinion based on purely individual expressions, which he accuses of atomism and mere mass politics. To be fair, this mistrust against majority vote is also shared by many twentieth century arch-liberals, such as Hayek, who perceive a tension between 'democracy', if reduced to universal suffrage, and liberal principles of the rule of law. Therefore, Hegel's position cannot be simply refuted on liberal grounds. Hegel argues that mere electoral politics cannot establish the organic unity of the body politic, which only emerges through representations of communities that make up the associations and estates. As we will discuss in more detail in Chapter 4, this mediation happens within public discourse as a process of deliberation, i.e. presenting reasons to be recognized. Further, the constitution as an historically evolved formal framework of the state also stands beyond particular interests of the society and establishes the autonomy of the state, which is embodied in the constitutionally bounded monarch. Schnädelbach (2000: 312) comments that a constitution with a strong presidential power would also fit into Hegel's approach.

15 In his analysis of the state, Hegel follows his methodological principles, since states can only exist on relational terms – that is, in relation to other states. As we shall discuss in more detail in Chapter 5, this view provides the foundation for his 'realist'

approach to international politics, which, however, has led to many misunderstandings, in particular regarding the role of war, apparently legitimizing Prussian militarism. However, as Vincent (1983) argues, Hegel's approach does not vindicate any particular historical state as the 'end of history', because his basic methodology would always suggest that current forms of state will further transform themselves, driven by internal and external contradictions (for example, in the lecture notes on the *Philosophy of History* cited by Vincent, Hegel praises America as the 'country of the future'). According to Hegel's methodological premise, the task of philosophy is mainly descriptive – that is, philosophy cannot identify universal normative principles independent from realized historical settings, it can only make universal principles explicit by reflection and analysis of these historical trajectories. And it is only in this sense that Hegel could call the 'Protestant state' the most advanced form of ethical life.

2 Hegelian principles of economics

Hegel, institutions and the naturalistic turn in economics

In this chapter we develop the Hegelian principles of economics. These are derived from Hegel's general theoretical stance and seem to be of sufficient generality to guide economic theorizing today. As such, they could be put on a par with other basic strategic values of economic research, such as the principle of methodological individualism. This principle is also not an economic proposition per se, but shapes all further economic inquiry. Similarly, we propose three Hegelian principles that could guide the construction of economic theories, but which are, in fact, philosophical heuristics. We believe that these principles are particularly well suited to lay the ontological and epistemological foundations for contemporary economics.

But what allows us to link Hegelian dialectics and the most recent approaches to economic analysis, particularly the analysis of institutions? It is quite obvious today that the mainstream of economics is no longer reducible to the 'neoclassical' style of modelling (Colander 2000; Davis 2006). There are a lot of challenging ideas that change the face of the mainstream, but two of the alternative currents that have received the most attention in recent decades are *the economics of institutions* and *behavioural economics*. Both are now canonized by Nobel Prizes, both are quite extensive in their use of economic *experiments* as a 'naturalistic' research strategy (as far as 'mainstream' approaches to institutions are concerned, such as Banerjee and Duflo 2011), and both tend to provide a *unifying framework* for the social sciences (North 2005; Gintis 2007, 2009). This last ambitious and totalizing strategy is, we would reiterate, reminiscent of Hegel.

The broad and growing interest in institutions is a remarkable feature of the current situation in economics. This differs from earlier theoretical controversies between different forms of 'institutional economics' and so-called 'mainstream' theorizing; today, the concept of institutions attracts theoretical efforts in areas such as game theory, mechanism design, theory of economic growth and political economy.[1] Debates on the nature of institutions are methodologically important because the answers to the basic questions (What are institutions? How do they change? What kind of influence do they have on individual agency and social life? etc.) guide research strategies in various fields of social science.

Another theoretical development is the rise of behavioural economics, experimental economics and neuroeconomics, which can be labelled as a '*naturalistic turn*'. It leads to rejecting the old idea of axiomatic foundations in economics; instead, even fundamental assumptions such as the model of the individual are subject to empirical scrutiny following the methods of the sciences.

We believe that the real challenge for any theory of economic institutions would be to open up to the results, methods and insights provided by the complex of modern cognitive sciences. In fact, the recent developments in economics often fail to establish this most general reference, tending instead to emphasize the relationship with particular subdisciplines of the cognitive sciences, such as psychology and the neurosciences. There are new intra-disciplinary borderlines implicitly blocking fruitful intellectual exchanges, such as those between recent psychological research in prospect theory and the more general cognitive science tradition of Herbert Simon (compare Davis 2011: Chapter 2). But it seems clear that what economics is actually establishing is a relationship with the broad range of approaches to the human mind that is currently included in the encompassing notion of cognitive sciences (Ross 2005). This broader view would also include many approaches to computational systems as models of the mind, such as Artificial Intelligence, which in turn are associated with the economic theories of markets as information processing complex systems (Mirowski and Somefun 1998).

In fact, this is the multi-disciplinary programme recently advanced by North (2005) and Aoki (2010) and which was propounded much earlier by scholars as diverse as Simon or Hayek; we believe that this general strategy is fruitful for the cutting-edge theoretical reflection in economics of institutions, thus opening the pathway to a synthetic view of innovative strands in contemporary economics, such as the economics of institutions and behavioural economics (for earlier debates, see Streit *et al.* 1997). In a preliminary and rough manner, this amounts to integrating (mostly micro-level) interdisciplinary theorizing on human behaviour into the framework of (mostly macro-level) institutional analysis inspired by holistic accounts of human sociality without relapsing into simple-minded reductionism, such as directly reducing mental phenomena to neuroscientific facts (we discuss this question in the subsequent chapter in greater detail).

This conceptual fusion is seemingly counter-intuitive. The naturalistic turn apparently maintains a reductionist research strategy that would lead us back to biological, psychological or neuroscience facts about human nature. Institutions, on the contrary, belong to the realm of culture, technology and other expressions of the human capability to introduce new artefacts into the world that did not exist in 'nature'. Institutions thus mark the difference between what we call the natural and the cultural/social. Human beings, while staying parts of nature, are unique in terms of their freedom to create institutionally defined artificial ways of life (Searle 2005). This focus on human freedom overcoming the constraints of 'nature' was a primary concern in Hegel's philosophy, as well as the ambition to go beyond the radical Kantian split between the natural world of causality and

the realm of freedom. So, we believe that the challenge and the promise of a Hegelian perspective in economics are to propose *a new synthesis between the theory of institutions and the naturalistic approach in the human sciences and economics*.

This need for synthesis has recently been recognized even in biology, where co-evolutionary theories have emerged emphasizing the separateness of human culture and institutions while claiming that a unified approach is feasible (Richerson and Boyd 2005; Jablonka and Lamb 2006; Danchin *et al.* 2011). Perhaps a primary philosophical concern regarding these efforts is to grasp the dimension of creativity in human institutions: that is, the human capability to create social systems not directly determined by any kind of biological or other physical causality, and yet reach beyond the scope of human intentionality – in Hayek's phrase, being a product of human action, but not of human design. This is reflected in the emergence of institutions: there is no direct physical cause that transforms paper slips into 'money'. Human social life is artificial to a large, if not decisive, degree.

However problematic the reference to Hegel might seem in this context, we claim that it still looks quite plausible. The most substantial contribution of adopting a Hegelian perspective here would be to show that the naturalistic approaches in economics can be reconciled with the previous 'institutional turn' and put together in a single conceptual framework. To be sure, this framework does not need to be Hegelian (for another alternative elaborated by one of us that is grounded on Peirce, see Herrmann-Pillath 2013a). However, Hegel brings certain decisive insights that, being properly reinterpreted, could provide a philosophical grounding for such a synthesis, along with some new and unexpected perspectives, as always implied by any good philosophy.

The central idea in Hegel's dialectics, which we take as a starting point, is to conceive the mind as a developing system increasingly mediated by external facts created, in turn, by mental processes. The necessary conjunction of these inner and outer phenomena embedded in collective structures is what Hegel calls *Geist* (today mostly translated as 'spirit'), as opposed to other concepts such as *Verstand* or *Vernunft* (mostly translated as 'understanding' and 'reason', respectively). 'Spirit' and 'mind' could both be back-translated into German as *Geist*. The translation of *Geist* as 'spirit' has always been preferred because Hegel's philosophy seems to be at odds with the standard notion of the 'mind' as denoting processes that take place within the human individual (or even within the head, in the sense of the brain/mind congruence hypothesis). Spirit, in contrast, refers to an entity that develops external structures (such as norms, rules, institutions, etc.), which is embodied in these structures, and which seems to be autonomous from individual 'minds'. We summarize this complex picture in Figure 2.1, still without making the collective dimension explicit. Then, if we take the Kantian distinction between subject and object as the generic categories, the subject produces actions which result in objects which are in turn constitutive for subjects – or, 'minds' express themselves in creations of minds which in turn create minds. This interactive and dynamic structure is Hegelian 'spirit'.

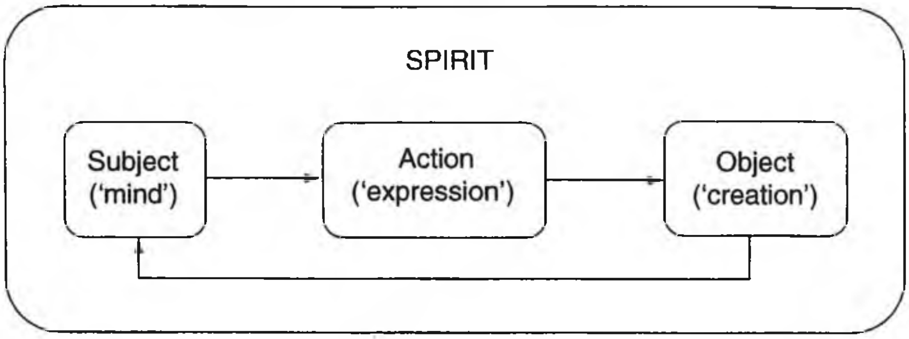

Figure 2.1 Hegel's conception of spirit.

However, the very fact that both mind and spirit for Hegel refer to the same phenomenon is telling. The general point that we want to defend is that a reconsideration of this mind/spirit distinction is important for clarifying the conceptual role of institutions in economics. For this reconsideration to make sense, it is important to note that Hegel, even when referring to the structures of 'objective' or 'absolute spirit', *is talking about 'mind' as well.* One of the most famous phrases that the Western intellectual tradition inherited from Hegel is meant to grasp precisely this intention, presented in a processual form: 'apprehending and expressing the truth not merely as *substance* but also equally as *subject*' (PS: 17).

Although Hegel is often considered to be an exemplary figure in German idealism, he was clearly aiming at a philosophical system which fully integrated the insights of the natural sciences of his day (Westphal 2008; Ferrini 2009b).[2] In adopting a dialectical approach to mind, and in contrast to many modern versions of naturalism as brain/mind monism (compare the overview in Papineau 2009b), Hegel realized that naturalism is unable to account for the fact of human freedom and creativity, which rests upon the autonomy of the first-person experience, the perennial challenge to naturalistic approaches to mind (van Gulick 2011). Hegel's solution to this problem is still challenging: *he asserted that it is precisely the externalized processes that contribute to actualizing this freedom in its full extent.*

Interestingly enough, modern cognitive sciences and brain research, from which behavioural economists and neuroeconomists heavily borrow, have clearly demonstrated that the linkage between neuronal processes and apparently 'mental' phenomena such as meaningful conceptual categories – including the concept of 'having a mind' – can only be established by external feedback loops that relate the Ego's actions with the Alter's actions, especially from the ontogenetic point of view (e.g. Hurley 2008). This approach to the *sociality of cognition* (e.g. Lewis and Carpendale 2002) is to a large degree anticipated by Hegel (we come back to this important observation later). A new strand in cognitive sciences further elaborates upon this externalist approach to mind in positing the concepts of '*extended mind*' and '*distributed cognition*', which refer

to the substantial externalization of human cognitive performance into physical structures that interact with the human individual, such as artefacts, but also regularized behavioural patterns of other individuals (Hutchins 1995; Clark 2011). Combining the social cognition and extended mind perspectives we derive an approach to mind that revives essential Hegelian insights, so that the conceptual distinction between 'spirit' and 'mind' becomes obsolete and we can trace *a process of mind becoming spirit through institutionalization.* This insight provides the clue to the synthesis of institutional doctrines and the recent developments in behavioural economics and neuroeconomics. The Hegelian perspective envisions this synthesis in a conceptual framework that is non-reductionist and puts the freedom of the human individual at the centre.

Now, many contributions to the literature on the ontology of institutions (including Searle 1995, 2010) adopt a naturalistic attitude. At first sight, this would imply treating institutions simply as epiphenomena of 'natural phenomena', such as genetically embodied dispositions to social actions. But this would fail to recognize the dual meaning of 'naturalism', which also can imply that *institutional facts possess their own nature*, in the sense of being real independent causes in the physical world (Bhaskar 1989; for a related Hegelian view on 'normative essentialism', see Ikäheimo 2011).[3] In Searle's parlance, observer-relative (or, in his more recent terminology, intentionality-relative) facts are facts after all, and thus are part and parcel of 'social ontology', which is in turn understood as an element of general ontology. 'Naturalism' in this sense does not imply that a certain kind of physical facts obtains a privileged ontological status, but that relations of interactive causalities that can be traced by scientific methods – that is, causal structures (Ladyman and Ross 2007) – become the generic objects of analysis and can be embodied in different forms, including social facts such as institutions. As such, *institutions are physical phenomena*, because they are embodied in actions taking place in the physical reality. Yet, this embodiment entails the emergence of novel properties, of which the central are human creativity and freedom.

In this chapter, we show that naturalism in this dual sense was anticipated to a significant degree by Hegel in his notion of *objective spirit.* In fact, in the *Philosophy of Right*, Hegel famously characterized the institutional reality of objective spirit as a 'second nature':

> The basis [*Boden*] of right is the *realm of spirit* in general and its precise location and point of departure is the *will*; the will is *free*, so that freedom constitutes its substance and destiny [*Bestimmung*] and the system of right is the realm of actualized freedom, the world of spirit produced from within itself as a second nature.
>
> (PR: 35; cf. 195)

Hegel's notion of 'spirit' includes both individual minds and their products in the intersubjective domain, and thus becomes a part of 'nature' as an element of the external world. This transformation has been the object of recent theorizing

in social ontology, yet the connection with Hegelian thinking remains largely unexplored. As Ikäheimo and Laitinen note,

> whereas elaborations on the nature of freedom, especially with regard to the question [of] how institutions can actualise freedom, are a distinct strength of the Hegelian theories, the ontology of institutions is often not developed in detail in contemporary Hegelianism.
>
> (2011: 7)

Our approach is a resolute step in this direction. While reformulating certain Hegelian insights we draw important implications for economics. In particular, we argue that the Hegelian perspective on economics gains more substance if we refer to the concept of the 'extended mind' in modern cognitive sciences.

Hegel's philosophy of mind is externalist in the sense of identifying the mind (*Geist*) with the developmental system dialectically moving from 'subjective' to 'objective spirit', the latter denoting those structures of the external world that emerge from human action (see Figure 2.1).[4] This is a transformative process that is analysed in great detail in the *Phenomenology of Spirit* and *Encyclopedia.* The Self, then, is by no means an internal phenomenon inaccessible to other minds, but is established through those external structures, precisely if we consider autonomy as a defining feature of the Self. Even more, the Self can only establish and even access itself due to the intermediation of these externalized structures. The autonomy of the Self emerges from subjective spirit, but can only develop through its institutionalized expressions in interactions with other Selves. One of Hegel's core ideas is that *individual autonomy and freedom are not a presupposition of analysis, but are actually an outcome of transformations of spirit.*

This is certainly not to mean that the subjective factors and critical attitudes towards existing institutions are downplayed or dissolved in impersonal social structures, but rather that individual agency and autonomy cannot be void from social, institutional contexts. Thus, for example, Moyar (2004, 2010) shows how individuality achieves its highest form in the shape of conscience in the *Phenomenology* and how 'agent-relative' reasons are essential for the whole project of realizing freedom in the realm of spirit. These structures 'define' the Self on the higher level of freedom. Otherwise, subjective spirit remains abstract and turns into what Hegel in the *Philosophy of Right* succinctly labels 'arbitrary will' (*Willkür*; see PR: 49).

In the *Phenomenology* Hegel introduced the notion of spirit as an 'ethical actuality':

> Spirit is the *self* of the actual consciousness which spirit confronts, or rather which confronts itself as an objective actual world, a world which has likewise lost all its significance as something alien for the self, just as the self has lost any sense of being a dependent or independent being-for-itself separated from that world. Spirit is the *substance* and the universal self-same

> persisting essence – it is the unshakable and undissolved *ground* and *point of origin* for the activity of each and all – it is their *purpose* and *goal* as the *in-itself* of all self-consciousnesses.... This substance is equally the universal work, which engenders itself through the *activities* of each and all as their unity and their selfsameness, for this substance is *being-for-itself*, that is, the self, activity. As *substance*, spirit is unwavering, even-handed *selfsameness*. However, as *being-for-itself*, it is the essence which has been brought to dissolution, the benevolent essence which sacrifices itself, within which each achieves his own piece of work, where each rends something from the universal being and takes his own share from it.
>
> (PS: 438)

The spirit here is conceptualized as something that is *distributed* among individuals (Hegel further speaks of 'dissolution'), that is not alien to them, somehow *embodying* their subjective aspirations and thoughts, something that also constitutes their 'work'. It is also *the activity, the performance and the aim* of their selves that, at the same time, allows everyone to participate in it – that is, to *recognize* and to be recognized by others (compare Brandom 2011). All of these features of the spirit can be summarized under the three headings which constitute the methodological core of the Hegelian approach to mind and institutions that we want to reconstruct: continuity, performativity and recognition (Boldyrev and Herrmann-Pillath 2013). These three principles provide the philosophical foundations of the Hegelian perspective on economics. Their preliminary characterization runs as follows, relating these to Figure 2.2, which modifies and simplifies Figure 2.1 in including other subjects:

Continuity. One should establish the ontological coherence between natural phenomena (such as certain configurations of things in the world of neuroscientific facts) and their social objectivations (such as institutions) which, however, does not imply any reductionist argument. Instead, it integrates the natural into emergent systems of human sociality, blurring the distinction between the natural and the social.

Performativity. Human action is creative in the sense that externalized expressions of the human mind establish their own reality as structures of 'objective spirit' manifesting the system of human freedom. The essence of any externalization process in this realm turns out to be this process itself, hence meanings in the institutional reality are inherently performative: the society is enacted, because it is not something that simply is – it becomes.

Recognition. Human action is impossible without the mutual recognition of agency as having meaning and intentions in collectives of interacting human individuals.

Taken together, these three principles define *economics* as a *theory of human sociality embodied in institutional structures*. These structures enable the expression of freedom in terms of economic phenomena such as the self-determination of consumption acts or entrepreneurial decision-making. This Hegelian view on economics as a science can best be highlighted against the

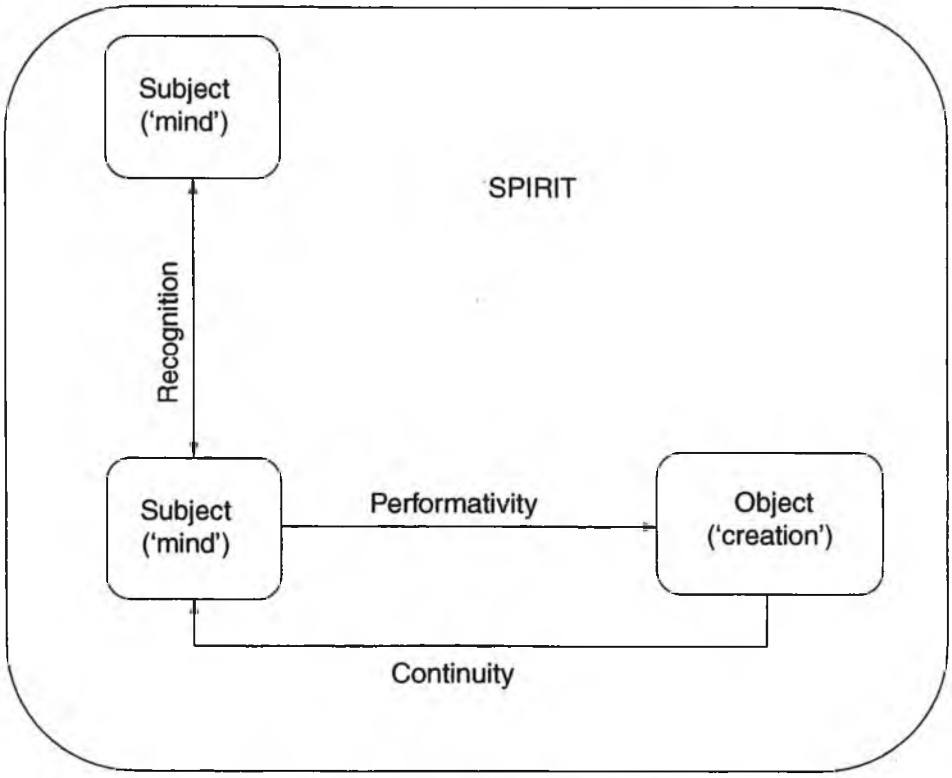

Figure 2.2 The principles of Hegelian analysis.

background of the most influential definition of economics by Robbins (1935), namely that economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses.

In what follows, we will provide a more detailed and focused discussion of these heuristics, referring both to Hegel and to some contemporary approaches, and then explicate in a more precise way the consequences of this analysis for economic theory and methodology.

Being-other as being itself: continuity thesis and institutional reality

The continuity thesis implies that aspects of the individual mind ('subjective spirit') and human sociality ('objective spirit') are amalgamated in the movement of the whole of spirit. Moreover, it states that there are mediations between the world of things/natural processes and the world of ideas and norms. That precludes us from strictly separating these domains. In particular, Hegel claims that the material world (nature) is a moment in the development of spirit and that the spirit somehow extends itself and 'covers', or 'incorporates', nature and the materiality of human beings. But, as far as its methodological relevance is concerned, the notion of continuity implies, for example, that it is impossible to analytically separate intentions from actions and their results and to construct

causal chains in which intentions precede actions as causes (see Taylor 2010 [1983] and Quante 2011:199ff.).

The idea of continuity naturally arises as soon as one looks at Hegel's system as a whole. In its developed form it is laid out in the *Encyclopedia*, divided into three main parts: *Logic*, *Nature* and *Spirit*. Simply put, the logical idea externalizes itself in order to return to itself in the shape of spirit. But nature and – in general – the externalization process is crucial for the emergence of the spiritual realm and remains its part (although in a sublated form). In fact, all we want to show in this chapter are different aspects of this externalization or alienation (*Entäusserung*) process.[5]

Hegel describes this transition from nature to spirit in a somewhat pathetic language (that marks the importance of the whole issue):

> [N]ature has found its consummation in living being, and has made its peace by shifting into a higher sphere. Spirit has therefore issued forth from nature. The purpose of nature is to extinguish itself, and to break through its rind of immediate and sensuous being, to consume itself like a Phoenix in order to emerge from this externality rejuvenated as spirit.... [S]pirit is nature's antecedent and to an equal extent its consequent, it is not merely the metaphysical Idea of it. It is precisely because spirit constitutes the end of nature, that it is *antecedent* to it. Nature has gone forth from spirit; it has not done this empirically however, for while it presupposes nature, it is already constantly contained within it.... [Spirit] wants to liberate itself by fashioning nature from within itself.
>
> (PN: vol 3: 212f.)

Nature emanates from spirit, is posited by spirit (§ 381), but contains it as well. It is both inside and outside the spirit, and what we see is a process of emancipation in which spirit and nature become intertwined. Transition from nature to spirit 'is not a shift into something entirely distinct, but simply a return into self of the spirit which in nature is self-external' (PSS, Vol. 1: 47). To be really free from nature, spirit should not separate itself from it. Rather, *it has to become nature itself* and thus to overcome, or 'sublate' it in itself. This general intuition underlies the whole edifice of Hegel's system.

Hegel argues that mental operations are impossible without the externalization of actions, which feeds back to the further development of the mind. This idea has been quite prominent in contemporary Hegel studies. It is adopted by Charles Taylor (2010 [1983]: 29) who calls it the 'principle of embodiment', meaning that, first, human subjects for Hegel are expressive and thus necessarily embodied in the external world and, second, that these embodiments further affect the 'internal' functioning of the mind (compare Figure 2.1, again). From this Taylor draws conclusions pertaining to his pragmatist interpretation of Hegel's theory of action mentioned above. He contends that one has to get the idea of one's own mental life by engaging in action and realizing that it is in this action that the essence of inner life is eventually embodied. There is thus also

continuity between the various aspects of action in Taylor that we discussed in Chapter 1. But this discussion simply reveals a special case of a more general methodological strategy.

A similar feature is stressed in Pippin's account of Hegel's social philosophy. For Pippin, spirit in Hegel is a socio-cultural achievement of which some natural beings are capable, 'and so there can be a continuity between natural and spiritual dimensions' (2008: 42). Spirit presupposes nature, but goes beyond it and cannot be reduced to its natural dimension. It is, however, equally incomplete without it. Returning to itself after being externalized, spirit reaffirms the continuity of its various forms. Unlike Pippin, however, we believe that the second, normative dimension for Hegel is linked to the positive, descriptive one. It is not that the realm of spirit merely complements the natural world with its causality; the continuity thesis implies that these two worlds interact and constitute a unity, a dialectical whole, of which neither part is fully reducible to the other one. This can be illustrated by Hegel's own view of causality. Instead of positing two or more distinct domains, such as the natural and the social, Hegel, in the *Encyclopedia* (§§ 153–159), first suggests the idea of *interaction*, thus overcoming the formal differences between cause and effect maintained by the understanding and, second, claims that this 'finite' causality must be built into an overreaching framework of *totality*. This unity, of which various interacting forces are only moments, is called a *Concept* or *Notion* (*Begriff*), and causality is thus an expression of logical necessity and normativity, in Hegel's peculiar ontological interpretation of logic (Drüe *et al.* 2000: 116ff.). Hegel's example of the Spartan constitution and the character and customs of the Spartan people (§ 156) that could be, on the one hand, regarded as both cause and effect, but, on the other, are themselves conceived as moments of the conceptual whole, is quite telling: Hegel deals here with *institutional* reality, which helps him establish a logic of dialectical totality.

To illustrate the principle of continuity in a more mundane context, let us imagine the simple situation of driving a car. When doing it, I employ various physical, emotional and intellectual resources coming from my natural bodily reactions, my brain and my habits, which enable me to drive smoothly and to avoid critical situations while on the road. The physical–mental continuum of my practical abilities makes it possible for me to drive 'automatically', unintentionally realizing correct behavioural reactions that are always adequate to the situation at hand. But while driving a car, I also make use of the physical and mental activities of others. These are, for instance, the ideas of the physicists and engineers that helped construct the car I am driving and that are objectified in the concrete forms taken by, say, an engine, a transmission or an air-conditioning system. I am, therefore, embedded into various nets of ideas, concepts, laws and regularities. Besides, for the car driver, no gaps persist between his or her mental world and the mental world of others. They are mediated by technology and, of course, by social interaction itself because, when I am driving, I constantly interact with others (or 'with the wills of others', as Hegel would say), who follow the same rules. Hence, this analysis extends to my

intentions, which actually originate in the embedded system described so far, such as braking in order to ensure a safe continuation of my journey. Further expanding the scope of intentions, the destination of my trip comes into play, which itself may be determined by my role in society. This, in turn, associates my intentions with a multitude of the intentions of others, and so forth.

This example can be thought of as a possible interpretation of the Hegelian *totality* perspective: the concepts being externalized become actual and are not isolated and independent, or 'in-itself'. External structures are inherently linked to the mental operations. Ideas matter, because there is a continuity relation between them and reality; moreover, the (social and technological) reality itself is – as far as it consists of embodied ideas – an absolute concept or even an 'absolute subject', following one of Hegel's subheadings in the *Phenomenology*. There is thus a literal sense in which Hegel talks of 'logic' in his social philosophy: institutions are governed by logic, but they also *are logic themselves*. In a dialectical manner, it means that institutions constitute the sites of subject–object interaction: in them, the individuals' ideas, aspirations and values can be objectively realized and the abstract formulations of dialectical synthesis receive a straightforward interpretation.

Hegel's continuity perspective, as we interpret it here, is increasingly gaining ground in modern approaches to human action, giving rise, for example, to notions such as 'agencements' in economic sociology which highlight the distributed nature of agency in networks of individuals and artefacts (Latour 2005; Callon 2008); similarly, in new approaches in the philosophy of science human epistemic activity is seen as being distributed (e.g. Giere 2002). The continuity thesis gives the Hegelian account of spirit and its development an interpretation that is in line with modern developments in cognitive sciences and in the philosophy of the social sciences. That the spirit embraces all of the spheres of being means that material, physical and neuropsychological moments must come into play if we speak of institutions since they are an integral part of this larger picture. There are no 'holes' in the spiritual (or institutional) 'tissue' – it is continuous and covers every aspect of human life (cf. Inwood 1992: 277).

These reflections resemble the familiar ideas of actor–network theory (ANT) advanced by, among others, Latour and Callon. There is indeed a strong similarity between the continuity character of the spirit and the continuity between various entities that constitute networks in the ANT sense. This resemblance, however, should not lead us too far towards the conclusion that ANT is a Hegelian project. Yet, we argue that both perspectives actually converge in viewing human agency as being constituted by relationships of which individuals are only a part.[6]

This analysis comes very close to some other modern views which deal with the processual nature of the human mind. Hegel's idea of developmental steps in constructing the mind anticipates contemporary theories of grounded cognition which focus on the sensorimotoric feedback loops that underlie *concept formation* – that is, cognitive classification and categorization enabled by abstraction (for example, distinguishing the activity of running from the

cognitive concept of 'running') (Garbarini and Adenzato 2004; Pecher and Zwaan 2005). The development of the mind is supposed to be based upon the evolution of external structures, and this has prompted us to draw analogies with the modern approaches to distributed cognition, thus conceiving 'objective spirit' as 'extended mind' (see also Crisafi and Gallagher 2010). Blanking out the outdated aspects of Hegelian natural philosophy, we can still see the logic behind dialectical argument: there are external phenomena that induce qualitative differences in the way that mental operations take place – think, for example, of writing (Menary 2007) or multiplying numbers (Giere 2002). Also characteristic of these recent approaches is the distinct emphasis on the cognitive *process*, and this dynamic perspective adds another score to the affinity with Hegelian dialectics.

According to the current findings, despite the fact that the complexity of internal mental operations as embodied in neuronal processes is limited by the physical properties of the brain system, the external processes can leverage and even change the nature of these processes, and follow an independent evolutionary causality (Dennett 1995; Aunger 2002). This could be, for example, a plausible interpretation of the process that, for Hegel in the *Encyclopedia*, amounts to a transition from 'intuition' and 'presentation' to 'thought', and to the free and then practical spirit that realizes its full potential in institutional structures and thus goes beyond mere 'natural' causality.

Although Hegel explicitly criticized the naturalistic (qua 'materialist' or 'physicalist') approach to the human mind in terms of what in his time was exemplified by physiognomy and phrenology, he was not claiming that any naturalistic or physiological explanation of spirit is inadequate. Hegel argues that 'observing reason' (of which the critique of physiognomy and phrenology is a part) represents a substantial advance over simple stages of consciousness, yet fails to realize that what reason observes in nature is actually the structures of unfolding spirit. Observing reason adopts a peculiar methodological stance, which is to separate 'inner' and 'outer' aspects of phenomena and to suppose that all observations that necessarily refer to the 'outer' aspects can be explained by reference to the 'inner' determinants. This relationship between the inner and outer aspects of reality is grasped by the laws of nature.

In his critique Hegel emphasized the expressive or performative nature of dispositions and actions, so that any physiognomic or phrenologic speculations of his times that sought to explain spiritual or psychological facts by making recourse to the features of faces or sculls remained partial and inconclusive unless the real action took place (MacIntyre 1976; Ferrini 2009b: 113ff.). Any characterological account of various traits and dispositions would have to admit the strong dependency of actions upon the context in which they gain meaning and, being institutionalized, thus exert a feedback influence on the disposition itself. Hegel argues that 'observing reason' cannot yet understand that this opposition between inner and outer has to be overcome, and he demonstrates this with criticism of different theories, such as the idea that observed actions need to be explained by the 'inner intentions' that determine the action. In fact,

Hegel argues, the intention is only describable in the context of outer facts, such as institutions and norms which only define what an intention is. So, it is the action that embodies the intention, and not a supposed inner mental state.

MacIntyre (1976) stresses the sociality of emotions in this account: any character in its outer appearances gets interpreted and becomes a part of a social space of meanings where it becomes actualized. This social space is precisely what we associate with institutions. In Forster's (2011) interpretation of Hegel's comments on phrenology, these remarks are seen as reflecting the externalist approach to mind in stating that mind is nothing but action. This is radical because it does not simply say that there are external determinants of mental content, but that there is no such thing as an internal mental state because these states are actions. Referring to actions, this means that physical characteristics of bodies also cannot adequately characterize the mind, as they are merely static.

This Hegelian critique is relevant in the context of modern neuroeconomics. How far can observed human behaviour – that is, human actions – be explained by going back to physical characteristics of the human body? In this view, modern brain sciences just move the frontier further ahead, from merely focusing on directly observable properties of the skull to internal physical mechanisms. In what sense were phrenologists (as highly respected representatives of the emerging scientific disciplines in Hegel's time), reductionists in the same vein as modern neuroeconomists? What Hegel refers to is the approach deeply rooted in Western science: atomism and reductionism in explaining natural phenomena. With reference to the mental, this amounts to internalism of whatever kind (see Chapter 3), disguised in 'individualism' as both a methodological and an ontological principle (Wilson 2004: 77ff.). Behaviour is seen as an 'outer' phenomenon and needs explanations in terms of its 'inner' determinants.

This Hegelian discussion of reductionism is illuminating for modern debates on 'free will' in the context of neuroscience (Davies 2007). For Hegel, free will is not an internal state, but results from external processes that enable individual freedom. This concerns the fact that 'meanings' are related to sociality, such that mutual recognition is compatible with multiple relationships between individual actions and internal physical states. So, for example, we are free to determine our gender in spite of the fact that there are biological differences between the sexes. Gender categories are external structures of meaning that are mapped onto the biological differences. We are by no means free to choose our biological drive (our primordial 'desire'), but we are free in determining its functions as meanings, which also implies that our own consciousness of these functions depends on the external structures (compare Brandom 2011). This freedom, however, is not in our individual hands, as it is created collectively in mutual recognition of many individuals. So, in the Hegelian view 'free will' is not a property of individuals but of collectives in which freedom of will is enabled.

This pragmatist Hegelian vision implies that any natural science explanation should also take into account the historical and institutional logic of human affairs not fully susceptible to naturalistic reductionism (for a corresponding neuroscience viewpoint, see Singer 2002: 73ff.). In particular, MacIntyre (1976) makes a strong

case for Hegel as a philosopher of history for whom historical explanations in the social domain are strictly preferred. A simple neurophysiological explanation (that is not ruled out completely) seeking to establish a causal link between some objective properties of the brain and human behaviour fails for the same reasons as phrenology: it cannot account for the social context in which the behaviour is put, and hence oversees its historical status – i.e. the ways in which one action (whatever was its initial cause) can be linked to other irreducibly social actions and meanings happening and persisting in time.

All in all, Hegel's continuity thesis involves anti-dualism, anti-reductionism, as well as an expressive, dynamic and pragmatic nature of human behaviour. His critique of the reductive behaviourism of his time implies that the human mind should be studied as a social phenomenon, and this insight *calls for a reconsideration or reinterpretation of modern cognitive science as applied to the social domain* – as in economics, for example.

However, there seems to be, again, a characteristic difference between Hegel's account and modern extended mind literature: for Hegel to grasp the spirit we have to dwell on its dynamics as teleologically conceived. Hegel's original developmental account is pre-Darwinian; it remains at odds with the open-endedness and uncertainty so important for the contemporary analysis of mind–nature interaction in the extended mind literature. At the same time, a general affinity remains between Hegel's developmental ideas/continuity intuitions and contemporary approaches to human mind in the cognitive science literature. A modern 'Hegelian' position is not compelled to adopt teleology, as we can draw on a vast literature on complex evolutionary systems in which notions such as 'teleonomy' can allow for a plausible substitute. In such an interpretation, human sociality appears as an emergent phenomenon that involves the creation of new forces of directionality in human actions and social systems which enhance intentionality in structures of extended mind. For example, technology can be seen as an evolving social structure which establishes a certain directedness and order in the succession of technological paradigms. Path-dependencies resulting from complex network externalities of uses of technologies impose constraints upon technological choices (Wyatt 2008).[7]

This departure from Hegel's original view can be reconciled with his praise of creativity – the ability of spirit to overcome natural predispositions (PSS, Vol. 1: 93). But what could be the sources of spirit's creativity, by which it finds rational structure within the world and 'overreaches' the reality external to it? What mechanism makes the shapes of spirit irreducible to the natural causality? And what bridges Hegel's views with modern evolutionary conceptions?

At the decisive point of transition from 'subjective' to 'objective' spirit in his discussion of 'psychology' in *Encyclopedia*, Hegel develops an *analysis of signs and language* (§ 458–459) as externalized phenomena that help transform representational mental activity into thinking. For Hegel:

> [w]e only know of our thoughts, only have thoughts which are determinate and actual, when we give them the *general* form of *objectivity*, of *being*

> *different* from our *inwardness* i.e. the shape of *externality* ... which at the same time bears the stamp of supreme *inwardness*.
>
> (PSS, Vol. 3: 205)

In the Jena lectures Hegel had already praised language as 'the name-giving power', contending that this power is

> [t]he primal creativity exercised by Spirit. Adam gave a name to all things. This is the sovereign right [of Spirit], its primal taking-possession of all nature – or the creation of nature out of Spirit [itself].
>
> (IPS: 89)

In the *Phenomenology* language is a form of 'the existence of spirit':

> It is self-consciousness existing *for others* ... which *as such* is immediately *on hand*, and as *this* self-consciousness, it is universal. Language is the self separating itself from itself, the self which, as the I = I, becomes objective to itself and which in this objectivity likewise sustains itself as *this* self, coalesces with others, and is *their* self-consciousness. The self likewise takes itself to be as it is taken to be by others, and this act of taking is precisely *existence which has become a self*.
>
> (PS: 652)

Hegel is interested in the universality of language that enables it to perform and communicate the identity of the self. In Taylor's view, Hegel advanced a new theory of meaning, for which the expression in public space plays the major role. Language is thus one of the most significant 'surplus' phenomena that establish social interaction and create the social space. Interestingly, language is also invoked by Searle in his analysis of institutions and is the major factor in the modern conceptions dealing with the co-evolution of human culture and biology (Tomasello 2008; Ross 2007). It thus seems to be a crucial element of externalization and creativity in the account of institutions we propose here.

The creative power of language is first and foremost its *performative* power. To be extended, the mind has to be externalized and performed. Hence, our second thesis is on performativity.

Enacting spirit: performativity principle as a theoretical strategy

Earlier, when dealing with Hegel's action theory and, more generally, with the idea of continuity between subjective ideas and their objective externalized institutionalizations, we emphasized the dynamic and expressive features of this embodiment logic. Intentions *are* actions because they become actions in the process of their actualization; subjective inclinations or ideas, or, more generally,

the mind *is* its intersubjective embodiments since they eventually decide what it really is. The most significant element in this story is the general *process*, of which all these elements are only partial moments and which is, for Hegel, the truth of the whole. The logic of this dynamics leads us to the concept of *performativity*.

What is meant by the performativity thesis when we talk about the Hegelian notion of spirit? The most general idea is that spirit itself determines the rules of its own development – the laws with which it reconciles its own mode of existence. Hegel abandoned the Kantian account of institutions as external norms and conceived of institutions as historically immanent and collectively grounded in performances or realizations of spirit in the way of its unfolding.

The general intention of this project appears early on. Already in the *Differenzschrift* published in 1801 Hegel envisages a system of self-producing reason in which 'the Absolute shapes itself into an objective totality, which is a whole in itself held fast and complete, having no ground outside itself, but founded by itself in its beginning, middle and end' (DFS: 113).

Phenomenology of Spirit gives some succinct formulations of performative powers:

> [T]he subject matter is not exhausted in its *aims*; rather, it is exhaustively treated when it is *worked out*. Nor is the *result* which is reached the *actual* whole itself; rather, the whole is the result together with the way the result comes to be.
>
> (PS: 3)

Thus, in the *Phenomenology* itself, 'this path to science is itself already science' (88) since it is precisely this performance of the untrue becoming true, of the flawed forms of consciousness paving their way towards the absolute knowing that constitutes the absolute knowledge.

In the later *Encyclopedia* formulation:

> The determinateness of spirit is ... *manifestation*. Spirit is not a certain determinateness or content, the expression or exteriority of which is merely a distinct form of it. Rather than revealing *something* therefore, its determinateness and content is itself this revelation.
>
> (PSS, Vol. 1: 53)

All these and many similar assertions give us a general intuition that there is nothing else in the essence of spirit (and the regions of being created by spirit) other than the movement of spirit itself which, 'having no ground outside itself' (DFS: 113), should, in order to succeed without shrinking to an empty declaration, integrate into itself various simpler forms. Here, as before, we refer to continuity, but with the second thesis already in mind: spirit contains its previous forms, it gives it a certain foundation, but this foundation is interiorized. And though we analytically separate the prerequisites of performance and performance itself, Hegel in his notion of spirit aims at merging these aspects

and seeing the spirit as a developmental process (or 'idea') that is defined as a performance of itself.

Performativity implies a mind-to-world direction of fit (Searle 2010: 38ff.): performative action in its narrow sense is ontologically creative in bringing certain facts into existence that are observer-relative (in Searle's 1995 parlance). This goes beyond the simple statement that there are observer-relative facts. For example, the qualia of 'pain' is an observer-relative fact that reflects the workings of the human neuronal system, including the brain. If I use language to express a commitment – for example, agreeing to marry another person – then this is another observer-relative fact that is dependent upon *collective intentionality*, which ontologically transcends the boundaries of the body as it refers to the collectivity of actors who *recognize* the performative act.

The reason we chose to characterize Hegel's expressivism as performativity is twofold. On the one hand, this notion gives the dynamic flavour to the notion of spirit that, as well as performative speech acts, actually exists only in its performance and which is this very performance. On the other hand, this qualification emphasizes the affinity with some modern theories that also employ the notion of performativity in various forms, including economics in the context of economic sociology (Callon *et al.* 2007). Along with conceptualizing reality as being composed of concepts and embodied ideas (whatever an 'idea' may mean), they also introduced the concept of performativity of economics, and this methodological twist marks the importance of this tradition for the analysis of economic institutions. In our approach, we draw mainly on Searle's theory of institutions and theories of distributed cognition, which we will combine into a unified framework in the final section of this chapter (see also Herrmann-Pillath 2010, 2012b).[8]

Hegel's spirit as the Idea performing – or, in Hegel's own terms, 'positing' – itself, and as a social reality 'infused' with the Concept (cf. Pippin 2008) represents these affinities fairly well. *Philosophy of Right*, the first text to search for Hegel's own institutional theory, is based upon the idea of performativity expressed in the foundational concept of *will*. Indeed, Hegel defines will as a practical aspect of spirit, as 'a particular way of thinking – thinking translating itself into existence [...], thinking as the drive to give itself existence' (PR: 35). Freedom should be actualized, and the will is the dynamic principle of this actualization, or performance. One of the most basic acts of the person is to 'give himself an external sphere of freedom' (PR: 73).

In Hegel's account of institutional reality, performative acts *sensu stricto* also play an important role. As early as 1805, when writing his philosophy of spirit in Jena, Hegel paid particular attention to the notion of the contract. For him, the contract is the same as exchange, but it is an ideal exchange (an offer):

> a [In it] I give nothing away, I externalize nothing, I give nothing but my word, language, [to the effect that] I wish to externalize myself.
> b The other party does the same. This externalizing/alienating (*Entäussern*) of mine is at the same time his will. He is satisfied that I grant him this.

c It is also his externalizing, it is [our] will in common – my externalization (*Entäusserung*) is mediated through his. I want to externalize myself only because he (for his part) wants to externalize himself also, and because his negating is my positing. It is an exchange of declarations, no longer an exchange of objects – but it counts as much as the object itself. For both parties, the will of the other counts as such.

(IPS: 124f.)

In the analysis of contract (one of the main topics in today's new institutionalism) in the *Philosophy of Right* Hegel refers to his account as worked out in the *Encyclopedia*, again dealing with signs and externalization:

> The distinction between property and possession, the substantial and external aspects [of ownership] ... becomes, in contract, the distinction between the common will as *agreement* and its actualization through *performance*. An agreement which has been reached, considered by itself ... without reference to its performance, is an idea of representational thought [*ein Vorgestelltes*], to which a particular *existence* ... must therefore be given in accordance with the distinctive manner in which *representational thoughts ... have their existence in signs*.... This is achieved by expressing the stipulation through formal *gestures* and other symbolic actions, and particularly by a specific declaration in *language*, the most appropriate medium of intellectual representation [*der geistigen Vorstellung*].
>
> (PR: 108)

The fact that Hegel invokes his theory of signs here may indicate that subjective and objective aspects interact in the contract, and an appropriate medium and mechanism of this interaction – constitutive for institutional reality – is performativity.

Other examples abound. In the *Philosophy of Right* Hegel insists – against the romantic notion of love – on the importance of the marriage ceremony and therefore on the actual love relationship (§ 164). In treating sovereignty (§ 275–279) he emphasizes the monarch's 'simple self' which embodies the state in a person and 'cuts short the weighing of arguments [*Gründe*] and counter-arguments [...] and resolves them by its "I will", thereby initiating all activity and actuality' (PR: 317). Furthermore,

> the very concept of monarchy is that it is not deduced from something else, but *entirely self-originating*; [...], *without* its monarch and that *articulation* of the whole which is necessarily and immediately associated with monarchy, *the* people is a formless mass.
>
> (PR: 318f.)

To be rational is to be intersubjectively articulated (another word for 'performed'), which is the idea behind his notion of the will's self-determination.

In the case of the sovereign 'I will', it is the absence of any external cause that is so characteristic of the structure of performative acts.

A performative act affirms itself by its own activity, and it is small wonder that the same structure appears again and again in Hegel's *Philosophy of Right*. Free will is not determined by anything else alien to it. For Hegel, the development of freedom that is identified with the dialectical progression of the objective spirit is the spirit's dialectical appropriation and internalization of various phenomena that are initially alien to it. This appropriation prevents the monarch's decision from being arbitrary. That is why Hegel takes pains to distinguish constitutional monarchy from mere lawlessness, one-sidedness and particularity of despotism.

But this is also a way to find the link between continuity and performativity theses. Hegel's use of performativity does not boil down to a groundless constructivism:

> [F]or neither Kant nor Hegel is it the case that there must be something like periodic explicit, intentional, conscious, authorizing, self-obligating ceremonies of some sort (for an individual or a community) to explain the authority of any norm. The gradual invention of opera cannot be said to be something someone or some group intentionally invented by some singular act, but it was invented, made. And subscribing to the values of opera need involve no 'I hereby do subscribe' inaugural commitment, etc.
>
> (Pippin 2008: 75)

Only by engaging with external reality is spirit (or, in fact, any idea, spirit being the idea which knows itself; cf. *Encyclopedia*, § 379 and § 381) able to claim its right. The idea does not assert itself in a pure form; it is not only by being rational that it can be 'automatically' actualized. Unmediated self-assertions of various ideas may be in vain, certain norms can be neglected or turn alien to individuals, and some forms of spirit can fail to function up to its own standards, as is brilliantly shown in the *Phenomenology*. The mediation is necessary, and it is this mediation that the concept of continuity aims to cover.

Thus it would be erroneous to characterize Hegelian philosophy as 'performative' in a sense of a pure social constructivism. In Austin's terms, performativity depends on conditions of felicity and does not simply operate as a self-fulfilling prophecy (compare MacKenzie 2006 in the context of modern performativity theory). Relevant here would be Hegel's famous phrase on the Owl of Minerva and the role of philosophy as an attempt to grasp the movement of world history *post hoc* rather than to produce various forms of rational social order by decree. But giving a rational reconstruction of the past, philosophy should also account for the performances which constitute an intrinsic part of the institutional space that is the realm of the spirit, and this refers to the positive – as contrasted with the normative – part of Hegel's philosophical project.

Only persons can fully realize performative acts, since these acts refer to the world of shared practices inhabited by other people. But persons emerge and

develop in processes of mutual recognition (see Honneth 1995, 2008). Recognition, therefore, constitutes a distinctively *social* element in the Hegelian approach to institutions that we aim to reconstruct. Any phenomenon of spirit is, first, related to its more abstract natural foundations – this is the implication of continuity; further, it exists only in performing itself; but, in growing out of its natural embeddedness and constituting its own self-liberation it provides a *claim* that is confronted with *another claim of equal validity*. This relation both forms social bonds and completes the Hegelian picture of institutional structures of modernity based upon the search and struggle for recognition.

Recognition as a social bond

Recognition is treated by some commentators (such as Williams 1997 and Honneth 2008) as the basis of Hegel's practical philosophy. Characterizing recognition in the most general terms amounts to saying that it is a certain relation to others, i.e. a specific social relation. Hegel took the idea of recognition from Fichte (a filiation that we do not need to elaborate on here: see Siep 1979) and made a crucial step forward in the *Phenomenology of Spirit* by claiming that recognitive relations are constitutive of self-consciousness. He depicts the emergence of self-consciousness out of the natural state of desire: a simple negative relation to the world transforms into the desire for recognition from others. But in order to achieve this recognized status one should abandon the monological loneliness of desire and engage in an interaction with the others who also struggle for recognition. Moreover, it is only in reciprocally recognizing each other that a genuine recognition may take place. Hence, recognition underlies the sociality of human action.

Current Hegel scholarship readily acknowledges the significance of naturalistic foundations in the movement of mutual recognition in Hegel (Honneth 2008); in the more general ontological account of Testa (2011) recognition is even ascribed to the non-social, natural realm. The initial disposition to satisfy one's needs entails the intention to compel the external world to the will of consciousness (we could also refer to the continuity thesis here). However, consciousness cannot achieve full control over nature. Moreover, for Hegel, the purely naturalistic attitude is incompatible with freedom.

As Siep (1979) showed, there are at least two levels of recognition in Hegel, both of which are relevant for our account – one pertaining to the mutual recognition of individuals, and another referring to recognitive relationships between individuals and institutions. The first form characterizes the Hegelian view of agency, and the second indicates the essential role of recognition in the stability of institutional structures. In both cases recognition functions as a guiding methodological principle of practical philosophy. Moreover, recognition 'is the spirit under the aspect of self-consciousness in interaction – interaction among individuals and among institutions' (Siep 1979: 93, quoted in Menegoni 2010: 247). Hence, recognition adds another determination to the realm of spirit, including the reality of social institutions.

The role of recognition in Hegel's account of modern institutions can be nicely illustrated by the 'transition from property to contract' in the *Philosophy of Right*. The will as such (which becomes externalized and thus objective in property; see § 46) can exist only as recognized; its existence for another, which is the true existence in the realm of objective spirit, 'can only be for the will of another person' (PR: 102). A contract is the embodiment of this new relationship of wills in which 'the ... parties *recognize* each other as persons and owners of property; and since it is a relationship of objective spirit, the moment of recognition is already contained and presupposed within it' (PR: 103). In this mutual recognition of externalized wills the ideas of continuity and performativity are both at play, supplemented by the principle of recognition. Moreover, the relation of recognition is often performative/constitutive (Testa 2011).

Finally, the state as actualization of concrete freedom in the *Philosophy of Right* is also based on recognition. This freedom

> requires that personal individuality ... and its particular interests should reach their full *development* and *gain recognition of their right* for itself (within the system of the family and of civil society), and also that they should, on the one hand, *pass over* of their own accord into the interest of the universal, and on the other, knowingly and willingly acknowledge this universal interest even as their own *substantial spirit*, and *actively pursue* it as their *ultimate end.*
>
> (PR: 282)

Recognition is thus a principle that holds institutions together; it serves as the main social bond, and without recognition the whole institutional structure of modern society is in danger of dissolution. In particular, individuals should recognize institutions as their own, should conceive of their deepest values and commitments as embodied in the system of objective spirit, but should also recognize the right of the universal. This institutional recognition is grounded in the individual one, in the sense of the micro-macro link discussed in Chapter 1.

In modern philosophy, one of the domains in which recognition plays a central role, though it is mostly not referred to as such, is *language* (Pippin 2008: 197; Moyar 2008; Menegoni 2010). Meanings of language are impossible to establish without recognition by the others to which a linguistic utterance is addressed. If I express a meaning in purely subjective ways, and this is interpreted differently by the receiver, I cannot claim the superiority of 'my' meaning: indeed, if I want to succeed in getting my message through, I need to recognize the Alter's meanings; however, this applies for Alter as well. Hence, approaches that associate meanings with individual intentionality are misleading: meanings reflect collective intentionality emerging from relationships of recognition. We can argue that this analysis applies for institutions in general, as they are necessarily rooted, following Searle, in linguistic structures recognized as status functions in which one social entity (such as a piece of metal) is treated

as something else (such as money), which requires symbolic – and hence linguistic – mediation (see below). Status functions can only establish institutions if the underlying meanings are recognized by all individuals, and if, along the lines of the game-theoretic notion of common knowledge, they all know that everybody else knows about this recognition.

How could we interpret the Hegelian recognition principle in terms of the various contemporary approaches to human agency? And what lessons could we draw from these comparisons for the theory of institutions? Hegel posits that in the externalization process characteristic of activity of the mind, the interaction between Ego and Alter plays a crucial role both in the development of self-consciousness and on the level of moral communities that need to transcend the stage of 'natural harmony' in which ethical life does not reflect individual freedom, as in the Greek polis (Pinkard 2008a: 124ff.).

There are further aspects of this insight relevant for the framework we are dealing with. In the context of modern theories of social cognition (Carpendale and Lewis 2004; Tomasello *et al.* 2005) the observations of others play a constitutive role in the sensorimotoric feedback loops that ultimately create mental structure – even to the degree that at the onset of human ontogeny, the distinction between Ego and Alter is not established, with own actions and the Alter's actions both being mediated by the same peculiar neuronal structures, the mirror neurons (Hurley 2008; Fogassi 2011). Based on these primordial mechanisms, human behaviour is seen to be shaped by unique capacities of imitation beyond mere mimicry and contagion (Tomasello 2008: 102ff.), finding expression in phenomena such as co-action without conscious control (Wegner and Sparrow 2007). Human imitation is conceptually intermediated, and hence relies on the dynamic structures of objective spirit (we elaborate on this further in Chapter 3). Then, in its most abstract form, mutual recognition establishes the separation between Ego and Alter, and to recognize simply means to acknowledge the distinction between Ego and Alter as persons defined by their autonomous intentionality. The recognition of the distinction between Ego and Alter means both to recognize 'other minds' and to recognize one's own mind as a separate mind (compare Humphrey 2007). On the one hand, the mirror systems in the brain appear to fuse Ego and Alter into a collective entity, but the mutual recognition of agency ultimately establishes the self as the origin of action.[9]

We have thus seen, first, that in various accounts of individual agency and institutional ontology recognition is a key principle of the social, and this concerns not only contemporary ethics and practical philosophy, but also modern cognitive sciences and metaphysics. We also have seen that Hegel's emphasis on recognition is implicitly or explicitly present in these discussions. But what about the specifically Hegelian insights to be incorporated in contemporary institutional theories?

One lesson one could draw is that only recognition-based intersubjectivity, and not violence, can be the true foundation of institutions in transcending the limits of a purely physical, nature-guided point of view (see *Encyclopedia*: § 435) and leading us to a proper acceptance of and life in the objective spirit.

The natural desire is therefore mediated and realizes itself in the complex institutional systems of the common ethical life (*Sittlichkeit*). Although the struggle for recognition is a struggle to the death, a logical (dialectical) movement lies at its centre: recognition by Alter is only valued as recognition by Ego if Ego also recognizes Alter. Hegel shows that the struggle for recognition is overcome and stabilized in the *Sittlichkeit*, while, however, still playing a significant role.

Thus, the Hegelian perspective makes recognition ontologically constitutive for the emergence and sustainability of institutions. We should distinguish this view from all of those economic approaches to institutions that ground adherence to institutions only in incentives and punishments represented by enforcement mechanisms. Even in the case of rule enforcement by physical threats, there is still a key difference between rule-following by an individual as a mere rational response to that threat or rule-following that is based on the recognition of the institutional nature of this threat. In the latter case, the threat is recognized as a general rule, and the two sides of the action recognize each other as being parts of a general system of rules, or culture. The criminal who is simply punished is not identical to the criminal who remains a citizen of the political body in which he lives. This difference is recognized in modern societies as constituting basic civil rights even for the prisoner who, as a rational being, should, in Hegel's view, be a part of the common universal life:

> The injury … which is inflicted on the criminal is not only just *in itself* (and since it is just, it is at the same time his will as it is *in itself*, an existence … of his freedom, *his* right); it is also *a right for the criminal himself*, that is, a right *posited* in his *existent* will, in his action. For it is implicit in his action, as that of a *rational being*, that it is universal in character, and that, by performing it, he has set up a law which he has recognized for himself in his action, and under which he may therefore be subsumed as under his right.
>
> (PR: 126)

The institutional nature of human action involves recognition as a basic social bond ensuring that the crime itself as a violation of right, being a part of the institutional reality of objective spirit, includes the punishment as its essential rational complement and consummation.

To sum up, the Hegelian stance implies that institutions create networks of mutual recognition, and that the processes of recognition are institution-specific. This idea underlies the whole normative discussion of recognition in Taylor (1992) and Honneth (1995). An individual comes to accept and change institutions in response to the recognition claims from himself and others. This Hegelian foundation of institutions – which involves both interpersonal coordination, but also something that Bowles and Gintis (1988) would call 'contested exchange', as well as what other scholars discuss as 'authority' (Stahl 2011) – is clearly relevant for today's institutional theory. In particular, the discussions and game-theoretic accounts of conformity, rule-following,

propensity to cooperate, loyalty and trust, are, in essence, concerned with the recognitive relations between individuals and institutions. Recognition seems to be a general idea underlying these various phenomena and pertaining to the emergence of modern individualism and individual identity, but also to the level of institutions. Many of the discussed ideas of the superiority attached to cooperative, pro-social behaviour (see, e.g. Bowles and Gintis 2011) appear to reiterate the genuinely Hegelian insights discussed in Chapter 1: first, that mutual recognition is constitutive of individuality, and, second, that the path towards freedom consists of overcoming the alienation of individuals from the institutional environment, making them 'return home' and *recognize themselves* in these seemingly separate overarching shapes of spirit. In this sense recognition may be seen as an underlying pattern for all the phenomena of collective life that were shown to be important for maintaining and developing the institutional structure of modern societies – ranging from 'social capital' (Putnam 2000) to 'social preferences' (Bowles and Polanía-Reyes 2012). That is why the conditions and mechanisms of recognition elaborated in Hegel's social philosophy and in contemporary Hegelianism are both normatively and descriptively relevant for today's economic theory of institutions.

The three theses taken together – with Searle all along

As a result of these reflections, we gain a deeper understanding of the interaction between the three Hegelian principles of continuity, performativity and recognition. We illustrate this interaction with reference to Searle (1995, 2005, 2010), who developed one of the most influential contemporary approaches to the social ontology of institutions. He implicitly establishes a connection between the three Hegelian principles that we advocate here.

First, he proposes a naturalistic approach to institutions in the sense that human dispositions to follow institutions are always mediated by the human body – that is, by neurophysiological structures that undergird the higher-level causal structures which realize functions (Searle 1995: 129ff., 2004). Next, the recognition principle seems to be important for him as well: he claims that institutions 'can only exist insofar as they are recognized and that recognition has to be symbolic, linguistic in the most general sense' (Searle 2005: 14). In stating the latter, he refers to the performativity principle, which he specifies in terms of stating that institutions come into existence through *declarations* (Searle 2010: 11ff.).[10]

As is well known, Searle argues that institutions emerge from status functions of the general kind '*X* counts as *Y* in context *C*', such as 'This slip of paper counts as US dollar in the context of the US monetary system'. But 'status functions can only work to the extent that they are collectively recognized' (2010: 8).

Recognition for Searle 'does not imply "approval". Hatred, apathy, and even despair are consistent with the recognition of that which one hates, is apathetic toward, and despairs of changing' (2010: 8; see a more systematic account in

Testa 2011). This insight can be used to distinguish between the Hegelian perspective and related approaches in linking cognition and institutions to the claim that individuals have to 'share' cognitive schemes in order to follow institutions (Denzau and North 1994). Recognition means that performing institutions does not even require agreement upon their meaning and interpretation. Collective intentionality regarding performative actions is mainly related not to the subjective meanings, but rather to the very reproduction of the externalized actions that in turn reproduce the status function. So, for example, marriage can mean a lot of different things to different people, and perhaps even two persons who marry one another may not fully share the same understanding of this event. But their collective intentionality (as well as that of their group) concurs in performing the ceremony of marriage, and this is accompanied by the reproduction of a series of actions which also confirm further action consequences. This is what Hegel's perspective leads to: *collective intentionality is embodied in the actions*.[11]

Status functions involve the performative shift of meaning in referring to a fact in the world in a different context as the anchor for following an institution. So, in the standard case of money, on which we will also draw in Chapter 3, a slip of paper is treated 'as money' in the context of certain patterns of actions which also include other institutions, such as markets, central banks and financial organizations. Status functions become elements in the webs of other institutions, thus revealing the creative nature of the actions which result in status functions. Institutions enable actions that are embodied in the new institutions, thus establishing a historical chain of institutional creations which cannot be directly ascribed to any physical causes operating at a certain point of time.[12]

In Searle's approach, physical entities matter in terms of the 'brute facts' that underlie the webs and chains of status functions (Searle 1995: 55). For example, the original uses of money might have rested upon the values of precious metals, and only later money evolved into a 'free standing' institution that no longer refers to any other physical fact. Interestingly, ANT also sees all patterns of rule-governed interactions as involving material items qua artefacts that obtain the status of artificiality by being embedded into the webs of human actions (for example, bacteria obtain a function in Pasteur's cognitive processes, thereby becoming part and parcel of the artefacts of the lab; see Latour 1988). In this view, all status functions have a material aspect as they need to be reflected in physical manipulations of entities in the world. So, money remains a physical entity even if it is just a flicker of electricity causing changes on a computer screen. This materiality of status functions is reminiscent of the continuity principle.

In drawing on Hegel, one of the main ideas we have established is that individual agency depends on recognition, that recognition fulfils the potential of human persons as carriers of rights, which are in turn manifestations of institutions (compare Schnädelbach 2000: 202ff. in connection with Pippin 2008: 203ff.). In Searle's terms, declarations are impossible to make if others do not recognize them as such. A Hegelian approach to status functions would state

that they are expressions which become valid only by being externalized, which implies that in this very externalization they rely on resources outside of the individual body, or the individual mind in the traditional meaning of the mind/brain identity; language is the most powerful resource here. These resources include the reactions of others to such a declaration, especially in terms of the recognition of its meaning and implications. The person can only establish her autonomy if she can rely on this recognition. The autonomy needs to be performed in an intersubjective context, and performativity cannot generate stable institutional configurations without recognition.

This is the reason why Hegel associates 'mind' with a whole set of externalized facts, such as language, religion or customs. An analogy with recent developments in the neurosciences can be found in referring to all those facts as 'desire independent reasons for action' (Searle 2010: 9). Indeed, Hegel's individual freedom involves becoming independent from the original biological drives of the somatic individual, a notion that certainly underlies many modern conceptions dealing with the essence of humanity.

Contrary to some recent developments in the neurosciences (and their philosophical interpretations) which claim to have shown that human intentionality is an emergent property of human decision-making and action which merely reflects causally antecedent neuronal processes in the brain (Dennett 1991; Wegner 2002), Hegel argued that human intentionality has become autonomous from this level. The major challenge that we meet here is to view both of those two positions as expressions of a naturalistic stance in the theory of human agency and institutions. This is possible if we regard the unique human capability of mutual recognition as persons as the ontological root of the emergence of desire-independent reasons for action. As we have seen above, this means that *we follow a rule not because we react to incentives, but because we recognize those incentives as being parts of the institution.*

The notion of *freedom* is indispensable, though implicit, in current economics: the theory of markets is mainly about voluntary interactions between individuals. However, this theory is based on a simple mechanistic account of human behaviour: the economic agents portrayed by theory do not have 'spirit' in the Hegelian sense. They are not represented as free relative to their own choices, but rather as 'rational fools' (Sen 1977). In contrast, the Hegelian perspective on economics implies that freedom of choice emerges from human reflexivity mediated by distributed cognition. That is, freedom of choice is a cultural and institutional phenomenon not necessarily based on rational reflection upon reasons for actions, but also including habitual, culturally and historically conditioned choices. However, these choices are free in the sense that they are a necessary part of a more comprehensive structure enabling them to actualize their potentialities and to contribute to the unlimited cultural creativity on the intersubjective level. This freedom of choice is enabled by unfettered public discourse about choices as a particular realm of institutional design and reasoning in the human economy.

The accounts of the ontogeny of human persons (or *Bildung* in Hegel's philosophy) seem to support this general perspective. The neuroscience literature

has also accumulated evidence for the primacy of shared intentionality in human actions, with the seemingly paradoxical insight that shared intentionality might even be an important part of the processes that operate in the neuronal system before consciousness of individual intentionality emerges in the child (see endnote 9). On this evidence, there is a developmental sequence that starts out from the merger of Ego and Alter in imitative actions and only stepwise leads to establishing the consciousness of the Ego's intentionality by developing the cognitive capacities necessary to understand the intentionality of others, thereby gradually enabling the infant to coordinate actions between different individuals (Carpendale and Lewis 2004; Tomasello and Carpenter 2007). In a radical interpretation of these empirical results, we posit that the maturation of the human person depends on the mutual recognition of being 'persons' in the intersubjective domain of spirit in the sense of the ascription of individual intentionality (for a related Hegelian view, see Stekeler-Weithofer 2011).[13]

There are two further lines of argument in the modern cognitive sciences and neurosciences that are of interest in this context. The first claim is that *all perception is based on action*, which implies that the notion of autonomy could be used to characterize the neuronal system in the sense that it does not simply 'reflect' sensory inputs but, first and foremost, creates those inputs by taking action in the world (e.g. Gallese and Lakoff 2005). Concept formation is therefore driven endogenously and includes a creative aspect in the most general terms, even when referring to the physical processes in the neuronal system; in the next chapter we will develop this idea in more detail.

The second claim is that the emergence of persons from the process of this sort may have been conditioned by selective pressures during human phylogeny and led towards the emergence of human beings independent from those very mechanisms. In stating this, we need to be very careful and clear: these persons are not individual bodies, but rather performances, such that the inner core of first-person experience is socially constituted.[14] So, to re-emphasize, the continuity principle can be interpreted in empirical terms as playing out between the biologically anchored human capacity for recognition and the emergent structures of recognition that overcome the biological fetters.

This is the framework within which continuity, performativity and recognition may be taken together to form a Hegel-inspired ontology of the mind as the basis for a theory of institutions.

- Continuity thesis urges us to link human agency with its cognitive foundations and to treat institutions as externalizations/embodiments of human mind, co-evolving and interacting with it.
- Performativity thesis emphasizes the importance of language as a mediatory entity between human minds and institutional reality, as well as the role of ideas for the emergence and evolution of social institutions, but also gives us a perspective on the autonomous causality of the social realm, as a normative space giving itself its own law.

- Recognition thesis, as an indispensable element of our methodological triad, captures the conditions of institutional stability and intersubjectivity and is grounded, as are the previous two, in both the ontology of the mind and in recent developments in the cognitive sciences.

Consequences for economic methods

In this section, we will try to develop some basic conceptual tools for economics, building on the above arguments. Our major references in modern economics will be the reconsideration of modern game theory in Binmore (1994, 1998, 2005), its methodological assessment in Davis (2011), and the institutional theory advanced by Aoki (2001, 2007, 2011). We first deal with game-theoretic considerations and then turn to their institutional interpretations.

Binmore argues that in the account of social interaction, once we consider sequences of games, *preferences* of agents become *endogenous* in the sense that they will adopt a shape such that equilibria are selected and maintained which are sustainable. One simple argument supporting this view is that different social systems of interaction compete against each other: systems that cannot maintain equilibria will collapse and therefore vanish. This argument applies on all levels. For example, marriages among two individuals may be stable or not, firms may continue to exist or not, or even countries may turn into failed states or not. In all these cases, the central question is whether networks of social interaction are sustainable through time. Binmore uses the general model of a 'social contract' here: sustainable relationships reflect a social contract between individuals, hence a set of institutions.

Now, the elementary problem in these social contracts is whether the individuals maintain cooperation or defect. The social contract should be based on the principle of mutual advantage – that is, all individuals should benefit from its existence, though possibly to a different degree. Then, whether individuals defect or not will depend upon the perceived advantages of the state of nature *without* a social contract. The state of nature plays the role of a threat point in negotiations. The threat point does not necessarily imply that this sanction is applied at any stage of the negotiation.

Binmore distinguishes between two different scenarios: one where enforcement is possible and one where it is missing. Social interactions evolve on two different levels. One is the 'game of life' in which the underlying biological properties of agents are determined. The other is the game of morals, in which preferences and equilibria are determined simultaneously. Under the condition of lacking enforcement devices, the game of morals involves the capability of individuals to reflect upon their actual positions in the game of life and to retreat from it by fictitiously returning to an 'original state' (Binmore 2005: 170ff.). This is a Rawlsian construct, but with an important modification: if no enforcement of contracts is possible, the equilibrium of the game of morals must also be an equilibrium in the game of life. So, the game of morals is actually a discursive process in which the different parties refer to notions of

justice and fairness, while relating to the state of nature as the threat point. This step can be associated with the 'struggle for recognition' even in the pathetic Hegelian sense, as this threat, once realized, would involve the 'life and death struggle' (PS: 187).

Three different time horizons in equilibrium formation are further distinguished: the long run of the game of life; the medium term, in which preferences are determined; and the short run of the actual equilibrium setting. Binmore introduces preferences of a particular kind, namely *empathetic preferences* supporting certain equilibria. This notion stems from the need to assess different possible positions that individuals may obtain in different future courses of events within the setting of a particular social contract. Empathetic preferences allow an individual to evaluate and compare outcomes from the perspective of different positions, including the preferences that an individual will have in these resulting distributions.

Binmore argues that these empathetic preferences define a system of social weights which make the different positions commensurable. How does this system evolve? This is the result of cultural evolution in the medium run. It can be interpreted as a transition from the assumption of internalist preferences defining the identity of actors to an *externalist approach* in which identities of actors are endogenous to the patterns of social interactions, which, in Binmore's view, is a cultural process under the constraints of human biology (compare Davis 2010: 154ff.; more on the internalism/externalism divide in Chapter 3). This is particularly relevant for the empathetic preferences supporting social contracts, i.e. stable institutional arrangements. Binmore makes a theoretical claim, but also refers to the strong empirical evidence provided by experimental economics, in particular regarding 'social preferences'. In experiments about social preferences, we actually observe a high degree of contextuality of preferences (in particular, individual preferences may vary considerably through time and across individuals, in spite of the generation of stable collective-level patterns; see Kirman and Teschl 2010). It implies, among other things, that it is the pattern of interaction which drives the expression of preferences, and *there is no internal anchor for preferences within the individual.* An important question here is: how can we conceive of a stable *identity* of actors across different domains of social interactions and through time?

Considering this question, Davis (2010: 95ff.) states that game theory needs to be reassessed on methodological terms. One has to distinguish between the mathematical structures of game theory and the economic applications which add certain material aspects to economic theory that are not necessarily inherent in those structures (compare Rubinstein 2000: Chapter 5). The locus of agency is traditionally placed into human individuals. However, in game theory equilibrium selection is actually based on certain assumptions about the informational structures that turn 'agents' into abstract entities which become public by the assumption of common knowledge. If the structures of the game and the preferences of the agents are common knowledge, game theory (in terms of the mathematical structure) actually describes a collective setting in which

equilibria emerge from interdependent choices which are in turn transparent to everybody. As a matter of fact, this *common knowledge* presupposes Binmore's notion of *empathetic preferences* because Ego would need to know how Alter evaluates different possible outcomes of the game in order to predict her strategic responses to Ego's choices.

The common economic interpretation of game theory is thus misleading when it projects the informational structure of game theory onto real-world economic actors, and then just assumes that those actors are defined by given preferences exogenous to the interaction. The key question in applying game theory must be *how common knowledge emerges* in which the actors assume their identities as players. Ross (2005: 291ff.) argues that Binmore's approach needs to be explicitly extended onto three levels, with one level on which these identities emerge in interactions and are stabilized by those interactions. Identities of actors are endogenous to the games they play, and this occurs because *games themselves are structures of distributed cognition* which endow the individuals with capacities of agency; only these capacities define their identities as actors (Davis 2010: 169ff.). Empirical applications of game theory therefore must make the *cognitive structures that undergird certain equilibria* explicit, as for Binmore's notion of emergent empathetic preferences. This is where Aoki's approach comes into play.

Aoki bases his theory on two ideas. One is that all institutions are equilibria in social interactions that can be modelled by game theory, both strategic and evolutionary. The other is that these interactions bring into life the external media of coordination, which Aoki calls *public representations*. These representations compress information about the equilibria in the sense that individuals rely on their existence as salient indicators guiding their strategic choices (compare Skyrms 2010 and Sugden 2011). This means that public representations channel behaviour so that certain equilibria are favoured, of which the public representations are the product.

Hence, Aoki's claim is that certain cognitive structures are endogenous to real-world games insofar as one kind of game outcome is the production of public representations which, in turn, shape cognitive structures. This view of institutions is a good interpretation of Binmore's idea that individual preferences are shaped by cultural evolution in a way such that equilibria are maintained. We only need to accept, first, that *cultural evolution is the evolution of public representations*; second, that *different sets of preferences define different individual dispositions to act which are triggered by those artefacts*; and, third, that *cultural evolution as evolution of artefacts is a population-level phenomenon.*

Now, we argue that these three points can be seen as developments of the Hegelian principles discussed above. This is straightforward if we reinterpret Binmore's and Ross' distinction between the different levels of games in the light of the continuity thesis. In social interactions, there is a fundamental *continuity* between generic biological characteristics of human individuals as well as idiosyncratic features that mark individual organisms from birth onwards,

on the one hand, and those characteristics that individuals obtain in the course of the evolution of preferences supporting certain patterns of social interaction. However, these preferences cannot be reduced to the biological level, since their formation is mediated by cultural evolution, i.e. by the emergence of public representations. Public representations significantly transform the human agent, but stay in continuity with its 'nature' because the 'second nature' of individual preferences emerges, in the shape of social norms, defining an identity of a human individual as well.

At the same time, the 'public' nature of the representations establishes these as observer-relative facts in the sense of Searle, such that they ontologically depend upon *recognition* by the individuals in a population. As we have seen previously, this recognition can only be based on collective intentionality – that is, on shared views of the rules governing the use of the artefacts (and not the intended meanings). As a result, the action patterns of individuals are *performative* in the sense that they bring a particular equilibrium into existence in which their preferences are endogenous, as mediated by the public representations that are an outcome of this equilibrium. This implies that their identities as human individuals are performative, too. The performativity of identity reflects the interdependence and the endogeneity of preferences in the Binmore's game-theoretic account.

Let us illustrate this approach by means of a hands-on example. How far does the headscarf define equilibria of gender interactions in certain Muslim societies? The headscarf is a cultural artefact and a strong signal that is intersubjectively recognized in the Muslim world, but that has different connotations in different contexts. For example, in diaspora the headscarf is simultaneously a signal of gender identity and ethnicity. Wearing or refusing to wear a headscarf has complex meanings which are largely independent from the subjective intentions of the women. The meaning is constituted by the reactions of their environment, and if they wish to impose a different meaning (for example, affirming its role as an indicator of ethnicity but refusing its role in defining gender identity), they have to enter into a 'struggle for recognition'. Depending upon the results of their actions, the headscarf will be maintained in a population as a cultural artefact independent from the individual interpretations. This pattern cannot be changed unless coordinated collective action occurs, signifying a shift in collective intentionality. Alternatively, a certain pattern can be imposed by force, thus triggering adaptations of gender roles.

The women have to use the artefact in order to be able to express their identity; the most straightforward reason is that they cannot avoid the meaning that is given to their *not* using the headscarf, which implies that even taking no action imposes meaning upon the non-action: this has to be anticipated by the women who consider this option, so that if they wish to avoid these interpretations, they may keep the headscarf, yet for different reasons. Therefore, we cannot make sense of any notion that would anchor preferences for headscarfs in a certain pre-interaction set of preferences. These preferences co-evolve with the system of interactions.

This example shows that the game-theoretic analysis of the endogeneity of preferences in games actually concurs with interactionist approaches in sociology (such as Barnes 1995). *Performativity*, in this most general sense, means that the cognitive structures that support certain actions co-evolve with those actions, in particular with regard to the self-referring cognitive structures – that is, to those involving reflexivity of actors. Preferences have this property as long as they are not merely biological stimulus-response patterns: they involve the fact that I am aware of these preferences, and that I can choose whether I follow them or not. Human beings are not 'rational fools'; human reason is based on the fundamental capacity for reflection – however, as we have seen, this is inherently mediated by the social, as reflection is based on concepts, i.e. representations which are population-level phenomena, such as language and all the other symbolic systems such as artistic representations.

Now, going back to Aoki's model, we can establish a generic conceptual framework for our Hegelian analysis of institutions, as in Figure 2.3 (Herrmann-Pillath 2012b). In this diagram, we refer to 'sign systems' instead of public representations. The concept of 'signs' is used to designate all possible kinds of symbolic media. The scope of the definition of 'media' is open and changes with the unfolding of the interactions. A special mention should be made of the fact that all actions can be signs themselves, once their observation contributes to the formation of common knowledge. This role of actions as signs is independent from the intentions of actors to imbue action with 'meaning', and emerges only

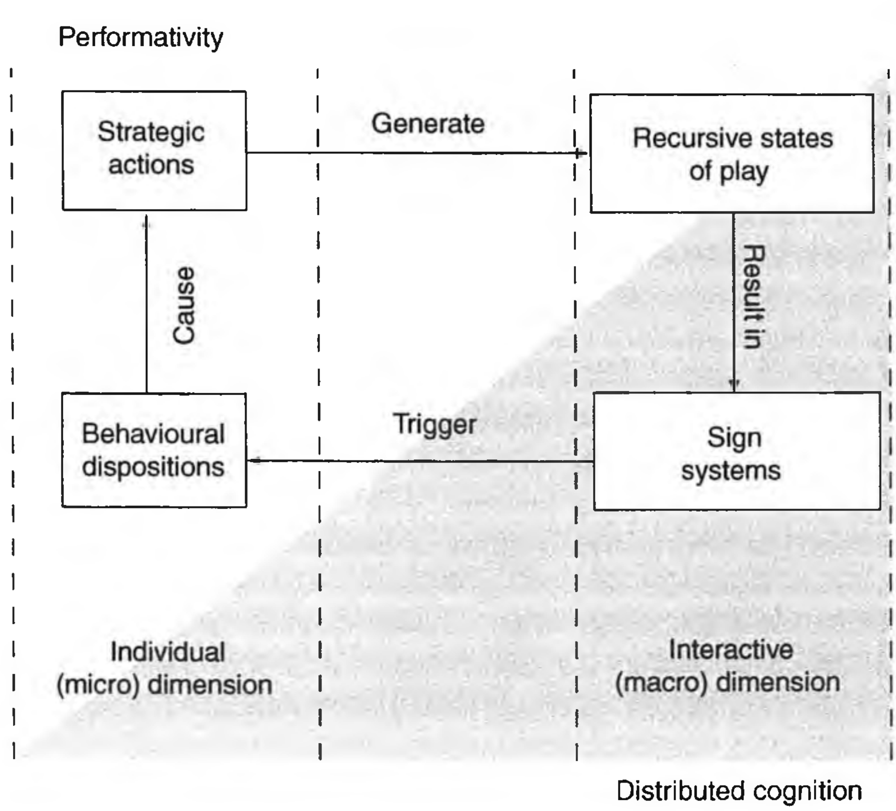

Figure 2.3 The revised Aoki model.

from the reactions of others to these actions. As we have seen in the example of the headscarf, whether the headscarf is a sign does not necessarily depend upon the intentions of the individual women, but emerges on the population level (compare Skyrms 2010).[15]

Aoki's revised and extended model starts from the standard conceptualization of economic interactions in terms of game theory, providing theoretical and mathematical structures to analyse the population-level interactions emerging from the interdependencies between individuals.

Game theory allows us to distinguish between the individual level and the results on the aggregate level which does not need to reflect any of the individual preferences, once we include externalities into our consideration. In fact, game theory (especially evolutionary game theory) allows connecting the individual and the aggregate level analytically in a way that those aggregation failures are avoided that would directly combine individual actions into a sort of 'average' behaviour in a population, such as in theories about 'representative agents' (Kirman 1992; however, some problems of aggregation persist, which we cannot further scrutinize here: see Davis 2009). This is essential in order to understand the relationship between individual intentionality, collective intentionality and the identity of actors. Individual intentionality can only materialize by reference to public representations, which are population-level facts by necessity. This creates interdependencies in terms of externalities that can result from individual actions on signs or actions as signs, because every individual sign use affects the uses of signs by other individuals (this is a basic idea in Akerlof and Kranton's 2000 'economics of identity'). As we have seen in our discussion of the headscarf in Muslim societies, even a non-action can operate as a sign and can influence the meaning of actions on headscarfs by others. Thus, we can state that these externalities in sign systems are the mechanisms by which individual and collective intentionality can be analytically separated. In the Aoki framework, collective intentionality emerges due to the implied meanings of population-level sign systems for enabling individual actions.

The aggregate results of interactions are *the recursive states of play* (Figure 2.3) in Aoki's framework. So, the idea of institution builds on the notion of actions recurrent through time. Singular actions do not make an institution. This is essential to relate the theory of institutions with the conceptual framework of infinitively repeated games, as done by Binmore and specified in the idea of uncertain open-ended interactions (Binmore 1994: 117). In this framework, the folk theorem holds in principle, implying that cooperative solutions are possible in a non-cooperative game structure, and the essential problem is to identify the cooperative solution, given a large range of possible solutions.[16] This is where the cognitive dimension comes to the fore, because all parties need to converge on certain perceptions and definitions of the situation, such that a cooperative state is achieved.

This presents an interesting twist in the tension between individual and collective intentionality. If cooperation is in principle possible even in non-cooperative interactions, once we consider the fact that real-world human

societies are open-ended and manifest many recurrent and criss-crossing interactions across different domains involving the same individuals (compare Bednar and Page 2007), then the pressing problem in social coordination is not proper incentivization and enforcement (which will evolve endogenously in the cooperation), but the working out of distributed states of knowledge and meanings of signs; once these cognitive structures that undergird collective intentionality (and thus support a cooperative solution) have emerged, it is sufficient for the actors to act under the presumption of individual intentionality (in more general terms, Skyrms 2004: 77 shows that information matters in establishing equilibria, but is without function in equilibrium). In other words, and restating our previous results, the individuality of individual preferences and goals, a Hegelian 'freedom', emerges from the evolving collective cognitive structures – that is, material structures of distributed cognition.

As the embodiments of distributed cognition, signs fulfil the 'information compressing function' (Aoki 2001). Signs do not 'represent' the state of play, but their meaning lies in the actions performed by agents who perceive the signs and operate on the basis of the information that they retrieve from the sign (which, however, is independent from the intentions of actions of sign users, following Dretske 1981: 72ff.). The underlying causation is in turn mediated by the actors and has to be conceived in a naturalistic way such that the signs trigger certain *dispositions* to act associated with the neurophysiological structures undergirding their behaviour (Searle 1995: 129ff., 2004). We thus come back to the continuity principle, without, however, relapsing to reductionism: neurophysiological structures are the material conditions for the causality between signs and actions, but they cannot explain any action as such; actions are emergent properties of the entire institutional circuit depicted in the Aoki model.

If signs trigger behavioural dispositions, this also implies that actions are not unambiguously predetermined. In a population of actors sharing certain dispositions there is still a wide range of realized individual actions. The notion of disposition does not prejudice any particular model of action generation – rational, habitual, affective or anything else – which also implies that there is no need for 'shared mental models'. What matters is that the actions maintain a certain state of play, of which the generation of signs is an inherent element. This means that the states of play manifest a variety of actions, thus revealing the evolutionary nature of the model, since behavioural variation is the precondition for the emergence of novelty. However, this is an aspect that we do not pursue further in this book, although we note its importance.

The causal mechanisms connecting *signs* and *dispositions* are *the embodiment of distributed cognition*, and also provide the analytical foundation for distributed agency epitomized in the ANT notion of *agencement*. As we shall analyse in more detail in the next chapter, this has been gradually recognized in economics as well, especially in normative theories of 'nudging' which build on the observation that human choices are deeply contextualized in relying upon environmental cues independent from deliberate rational decision-making.

If we then close the circuit, we realize that this cognitive function of signs results in a channelling effect on behaviour such that the reproduction of particular states of play is favoured. This is what we refer to as 'performativity'. Performativity means that structures of distributed cognition evolve endogenously with the states of play such that these states of play are being reproduced through time. Or, in more concrete terms, and referring to Hegelian notions, the ideas and beliefs are the essential elements of the distributed cognition patterns and, as an objective spirit, constitute the states of play and thus form the institutional structures. The states of play are therefore endogenously determined and reproduced over time. However, this does *not* amount to a self-realizing tautological relationship. There are three basic reasons why the reproduction of institutions can fail.

First, there is a material infrastructure that determines the specific physical causalities involved in the different mechanisms. In particular, the structure of externalities between actions is technologically mediated, thus leading to possible changes in the pay-offs. For example, a state of play in which financial side-effects can occur between different financial institutions will evolve depending on the size and degree of integration between different parts of the financial system. These pay-offs are partly observer-independent – that is, determined exogenously, like levels of pollution. Sign systems also build upon the evolving technologies of semiotic production and communication, such as the possibilities offered by the World Wide Web. Therefore, various technological constraints limit this enactment of institutions.

The second reason why institutional reproduction can fail implies the probabilistic nature of dispositions and the interactive complexities on the population level. Even purely random variations of behaviour in a population can result in large changes of aggregate behaviour, depending on the material structures of generating pay-offs (the famous 'butterfly effect' in complex systems).

Finally, changes of states of play can result in the transformations of signs, in turn triggering probabilistic changes of behaviour with similar effects as in the previous point. This means that even if initially the state of play is being reproduced, some small changes in the co-evolving signs can ultimately trigger substantial changes of behaviour. In this context, it is also important to recognize that new signs may emerge that only obtain meaning in and through the actions they generate. This might come about independently from the original intentions of creating certain signs.

To summarize, the Aoki model, extended and revised along the lines of the Hegelian principles developed in this chapter, provides some important elements of a theoretical tool-case, also familiar for today's economists:

- *Game theory* both in strategic and evolutionary versions, with a focus on repeated games: this mainly applies in accounting for the causalities connecting individual actions to the aggregate population-level outcomes;
- *Behavioural economic analysis* and related disciplines such as the recently

emerging neuroeconomics: these, and not just the axiomatic theories of choice, are needed to research the ways that individual cognition and individual actions are causally interdependent;

- *The economic theory of institutions* as applied to studying empirical trajectories of historical change: this contributes to understanding the interactions between material conditions and institutional mechanisms.

The contribution of the Hegelian perspective is also quite apparent. Hegel's notion of spirit suggests that there are cognitive and mental structures underlying institutions; that in and with the help of these structures the institutional reality is co-performed along with various material, technological and intersubjective phenomena; that this institutional reality of the objective spirit forms the networks of recognition that ultimately define what we currently designate as individuality, intentionality and the general visions of ethical, political and methodological individualism, but also ensure the stability of intersubjective institutional edifices. Heuristically, this suggests that economic analysis may be enriched with the notions of distributed cognition and performativity, potentially informing both micro- and macro-level accounts of institutions – something we venture in the next chapter.

Notes

1 We do not wish to delve into the intricacies of identifying different approaches and schools of thought dealing with economic institutions. In particular, we would avoid direct reference to the term 'institutional economics'. It often explicitly refers to more narrow fields which highlight the role of institutions, either in terms of opposing themselves to the so-called 'mainstream' economics that allegedly neglects institutions, or in the sense of applying mainstream methods to the study of institutions, while also claiming that economic research has neglected the topic (for a survey of these distinctions, see Hodgson 1999). The latter has been mostly associated with the field of 'New Institutional Economics' aptly summarized in monographs such as Eggertsson (1990) or Furubotn and Richter (1998); the former with the so-called old institutional economics associated with American pragmatism, and which is today mostly a part of 'evolutionary economics', if anything at all. Today, these separations have lost much of their significance; yet, the problem is that disciplinary borderlines often fail to recognize all of these legacies of intellectual history. For one, there is a broad range of research that has always focused on institutions, but was never regarded as a part of 'institutional economics', such as research on international trade and its institutions, and which for that reason we will scrutinize in Chapter 5 (e.g. tariffs, regional trading agreements, etc.); next, there are research programs that clearly focus on institutions but which have also remained separate from institutional economics in the past, such as the doctrines of public choice, mainly because they should comply with the methodological rules of broader disciplinary discourses linked to certain mathematical models, e.g. of social choice theory. New approaches were recently suggested, mainly driven by methodological innovations, such as applying advanced econometrics, first in cliometrics as a new way of doing economic history, and then later in analysing the relationship between institutions and growth (see, for example, Acemoglu *et al.* 2002). In these approaches institutions were 'rediscovered,' without, however, establishing connections to the earlier contributions. Game theory has also ceased to be a merely technical or abstract field and was appropriated by economists

studying institutions (Aoki 2001). This has brought experimental economics into play, because games can be seen as modelling institutions, and thus experimental tests of games can also be regarded to be the tests of alternative institutional arrangements in real-world societies (such as in public goods games; see, for example, Herrmann *et al.* 2008). Finally, experimental economics and the mechanism design literature have highlighted a fact recognized by institutional economics long ago, namely that markets as such are institutions (Roth 2008). In our use of the term 'institutions' with reference to economics, we refrain from exclusively identifying with any of these research directions.

2 The empirical sciences play a major role in Hegel's doctrine of 'observing reason', as a stage in the development of consciousness. Hegel praised Francis Bacon (Ferrini 2009a) not just for his empiricism but also for the notion that empirical knowledge consists in the identification of causal laws. This understanding of contemporaneous science was based on thorough study and understanding. Hegel was even an assessor in geology and had very detailed knowledge of the contemporary debates in the sciences, particularly mathematics (Ferrini 2009b). Hegel was perfectly aware of the differences in approach between the sciences proper and the philosophy of nature (Drüe *et al.* 2000 144ff.). He denied reductionism but approached each level, such as mechanics, chemistry and biology, as emerging from the lower levels, with human spirit seen as the pinnacle where the subject and the object meet (Westphal 2008; Heidemann 2008). That is why Hegel adopts a non-mentalistic view of idealism in which empirical laws ultimately represent the unfolding of the 'concept' that makes up spirit, thus constituting the unity of mind and nature. Hegel's notion of 'nature' as the object of science is ultimately derived from the notion of the 'idea', with nature being its necessary manifestation (the *Anderssein* of the idea). Newtonian mechanics played an essential role in Hegel's concept of 'force' as applied to the analysis of consciousness (Westphal 2009). Forces as manifestations of causal laws are the defining properties of objects, and so a reductionist atomism fails. Forces are relations of objects, so that single phenomena can only be explained in considering the whole system of forces acting together. This analysis is also characteristic of Hegel's general approach to the relationship between subject and object, thus implying the impossibility of reducing human action to internal facts about the human body and brain, as we shall see later. See also Chapter 1, endnote 8.

3 There are different meanings of 'naturalism' in recent philosophy and social theory; confusion with the topic of the 'naturalistic fallacy' in ethics needs to be avoided. Following the survey in Papineau (2009b) one can distinguish between ontological and methodological naturalism. Ontological naturalism is especially important in the philosophy of mind, where it implies that there can be no additional substance or causal mechanism that refers to 'mental' phenomena as being ontologically different from physical phenomena. Naturalism implies the rejection of Cartesian substance dualism (for influential accounts, see Dennett 1991 or Kim 2009). (Note that Hegel also rejected substance dualism.) Methodological naturalism refers to the generalization of explanation patterns characteristic of the sciences. More specifically, this can refer to the emphasis on particular kinds of causal explanations as opposed to the approaches common in the humanities, such as hermeneutics. This is the sense in which Bhaskar uses the term, when he argues that what matters in determining the status of reality is the applicability of causal explanations. There are, however, positions in methodology, such as that of Stegmüller (1979, in his famous comparison between a poem and a quasar), who argues that hermeneutics can be subsumed under general patterns of causal explanations (for a related discussion, see Mantzavinos 2005). Again, Hegel's views count here, because Hegel (see endnote 2) explicitly adopted science as a framework for philosophical analysis, even in the specific sense that the task of philosophy is primarily descriptive. Hegel would, however, reject Papineau's distinction between methodological naturalism and 'conceptual analysis' as a

distinctive method of philosophy because in his approach to substance, concepts are what is 'real', or 'actual' (*wirklich*), while individual entities are merely appearances that have to be elevated to the realm of the concept.

4 One remark concerning Hegel's definitions is perhaps in order. One has to keep in mind that they are not to be understood in the conventional meaning of a simple identity ('A is B'), but should be thought of in conformity with Hegel's theory of 'speculative sentence' which attempts to blur and overcome strict differences between the subject and the predicate. In other words, 'A is B' means that A *becomes* B and that we can demonstrate a process of identification and of A's transformation into B. To say that the mind is institutional is, therefore, to say that the mind in its development towards freedom takes up sociality as its essential determination.

5 It is important to distinguish between alienation in the negative sense of estrangement or separation (best covered by the German *Entfremdung*) and alienation as externalization and objectivation (which defines the historical dynamics of spirit as conceived by Hegel, and is best expressed by the German *Entäusserung*). These distinctions were recognized only after Marx used Hegelian terminology to discuss the alienation of labour in his *Economic and Philosophic Manuscripts of 1844*. However, Marx's usage is quite specific: he follows pre-Hegelian discussions of alienation (for example, in Rousseau and Schiller) and, as a matter of fact, founds his argument on a well known topos of distinguishing between the self-same and immanent state of the idealized past, on the one hand, and the torn, disjointed society of the self-alienated individuals on the other. Along with this cultural critique a legal meaning for property alienation should be also kept in mind, and it was famously used by Marx in his analysis of capitalist exploitation. But in what follows we will stick to the more general ontological meaning of alienation and, to avoid confusion, we will talk of externalization.

6 The main difference is ANT's explicit materialism, which is at odds with Hegelian tradition. In particular, one of the basic contentions of ANT theorists is that human and non-human entities are symmetrical in forming networks. Elements of the network, although conditioned by their relations to the whole of which they are parts, are in general not privileged one over another. In contrast, Hegel explicitly favours non-material aspects of the spirit over material ones; however, 'materiality' in his approach is not just in opposition to the 'non-material'. His account is teleological; he seeks to integrate the natural into the whole and to regard this whole of spirit in its development that grasps and internalizes materiality. ANT theorists are inspired by quite a different philosophical viewpoint. However, there is common ground: both Hegel and the ANT theorists want to blur the boundaries between the material and the spiritual, with Hegel trying to subsume the material within the 'kingdom of spirit' and to describe it as a moment of its development, and ANT treating objects, humans, ideas, concepts and microbes as equally co-determining the functioning of a network but also dependent upon this network, tied together in its totality. The metaphor of a network, a fuzzy domain where heterogeneous elements interact, a site of mutual influence that is so important for ANT theory thus could be interpreted along Hegelian lines.

7 Hegel wrote before the advent of evolutionary theory. However, in the theoretical battles over the meanings of 'evolution' the question of directionality and emergence never lost significance (cf. Blitz 1992). Note that another towering intellectual figure of the nineteenth century, Peirce, was already receptive to the new evolutionary theories in distinguishing between 'mechanistical' and directional processes, which Short (2007) in his brilliant synthesis of Peircian philosophy called 'anisotropic'. Peirce partly adopted a Hegelian perspective in his theory of signs, which emerge in an evolutionary way and exert an independent causal influence not only on social but also on natural processes, thus coming very close to Hegel's understanding of the 'Concept'. In modern evolutionary theory, many attempts have been made to grasp the obvious

phenomena of directionality of change without recurring to teleology, such as the phenomena of size increases of organisms and ecological systems going hand in hand with increases of complexity (Bonner 1988).

8 There is a huge literature on performativity. In our context, we start from the original uses in speech act theory (Austin 1962; overview in Green 2009). Searle (2010) uses the term 'declarations' in highlighting a special kind of performative utterances. For us, these distinctions do not matter in detail, and we prefer the general term 'performativity' as it allows us to highlight the connections with other approaches. Further, as emphasized by Tuomela (2011), speech act theory might be somewhat limited in catching all aspects of performativity of institutions as it is lacking reference to social structures, especially causal powers as embodied in social powers. In Searle's analysis these are included as a separate 'power creation operator' and might be regarded as an essential element of performativity. In economic sociology the term has mainly been introduced in connection to the performativity of economic theory (MacKenzie 2006). These uses go back to Barnes's (1995) interactionist sociology, which deals with the self-referring structures of knowledge reproduced through actions that result from this knowledge. For example, ideas about capitalism are performed by being embodied in actions that reproduce the system of capitalism as envisioned in these ideas. MacKenzie distinguishes between several kinds of performativity of economic theories, including 'strong Barnesian performativity,' implying that theories influence practices in such a way that reality approaches theory. This notion can be extended to all kinds of cognitive structures, including conceptualizations of the economy (Çalışkan and Callon 2009). These perspectives on performativity share a general dynamic orientation in refusing to accept any pre-given essence of the process that would somehow precede the process itself. It is in this context that Butler (2010) interprets gender roles as performative.

9 As has been emphasized by many contributions to social cognition, we can even argue that only the recognition of other minds leads to recognition that the individual has a mind of its own, in the sense of projecting the 'intentional stance' back to oneself. On an abstract level, the intentional stance implies that object systems are perceived as intentional systems, which can apply even for inanimate objects. The intentional stance can be seen as having evolved as a successful way of dealing with complex systems which are difficult to access directly in order to predict their operations (Dennett 2009). The human mind is considered to be such a system, so that the intentional stance would not imply that minds have intentions, but that human observers ascribe intentions to brains, thereby also constructing the mind. Empirically, this view is partially supported by neuroscience and developmental psychology, which have shown that infants gradually develop a 'theory of mind' by which they ascribe mental operations to others; this seems to be associated with peculiar neuronal structures (Frith 2007; Frith and Singer 2008). The individual experience of having a mind might be considered as a self-referential application of this 'theory of mind'.

10 Although Searle (2010) regards status functions as linguistic acts, he treats language itself as being independent of those acts, i.e. language is not seen as one institution among others (language is seen as being indispensable for all other institutions, but not vice versa). This seems necessary for avoiding circularity (Searle 1995: 51ff.). However, this indirectly leads back to a misplaced mentality in institutional analysis, as it implies the possibility of semantics independent from real-world causalities relating meanings to actions. This seems to revive a pre-Wittgensteinian approach to language as a medium that could play a merely representational role. But it is hardly possible to separate language and institutions analytically: language cannot be private, it essentially rests upon collective intentionality – hence the 'shared meanings' of utterances, which, however, are not 'shared mental states' but shared chains of actions, including linguistic actions. Meanings are not autonomous from the actions that are caused by linguistic utterances and that flow back into their exchange between

different persons. These aspects relate to a deontology of proper or accepted meanings, including proper actions. But then the analytical boundary between language and institutions is at best fuzzy, if not impossible to draw.

11 This intellectual strategy finds support in the critique of Searle advanced by Tuomela (2011). Whereas Searle in his more recent writings defended the 'mental' nature of intentions, and therefore seems to approach status functions as mental facts, Tuomela, inadvertently being in accord with Hegel, emphasizes the role of actions in embodying the status function in terms of causal powers. This also affects the ontological interpretation of collective intentionality: although its role is already clearly recognized in Searle (1995), there is a gap between this role of collective intentionality in institutions and in establishing the underlying ontological context. Tuomela argues that Searle's emphasis on speech act theory remains individualistic in the sense that speech acts refer to individual utterances. In his approach to institutions, he posits that collective intentionalities in terms of the 'we-mode' are indispensable in the definition of institutions, thus referring to collective acts of recognition and collective forms of agency, comparable to the status of a team playing soccer: though relying on individual actions ontologically, 'playing soccer' is an activity that is impossible to achieve by means of just aggregating individual actions, even in the sense of adding up individual speech acts. 'Playing soccer' means to act as a team in a constitutive way (compare Sugden 2000). However, as Tuomela (1995: 369ff.) made clear, collective intentionality does not imply ontological collectivism – that is, positing supra-individual 'minds' of collectives of actors (compare the discussion in Wilson 2004: Part 4).

12 One concern in Searle's original theory was that it seemed to be unable to account for the so-called 'free standing terms' where *Y* is not treated as something else (such as the example of the fictitious corporation, in which there is no direct reference to another fact such as the slip of paper). Tuomela (2011) points out that this would overlook the fact that single declaration does not make any sense if it is not matched with a sequence of actions by real-world persons who actually use the newly created *Y*. This is a general point that applies to declarations: a declaration can only have real consequences for the person making it if there is a sequence of actions by others that, combined with the content of this declaration, lead to other actions which follow from the declaration and result in the reproduction of the declaration by its originator through time. For example, the use of money in markets by certain individuals must lead to actions by others that support the reproduction of the original use of money; in other words, flows of actions must be closed circuits that reflect mutual recognition of the institution. Following Tuomela (2007), we can argue that these conditions can only be fulfilled if the declaration is at least implicitly done in 'we-mode', even if uttered individually. So, for example, a fictitious corporation can only come into existence if the intention to use it is somehow shared in a collective of persons who understand the meaning of this freestanding *Y* term and who act accordingly, thus confirming the original intention of the person who uttered this status function. These actions are the *X*, whereas *Y* counts for the status function. Evidently, this utterance could only become possible if these actions have been duly expected, because otherwise the very meaning of the *Y* term would have been vacuous. Therefore, the original act relies upon mutual knowledge about the collective intentionality underlying it.

13 This developmental process can be explained in evolutionary terms: the emergence of mutually recognized individual intentionality can be interpreted as an evolutionary advantage for human groups that had originally built on the collective intentionality originating from the primordial intersomatic causal connectivity of neuronal stimulus-response patterns, such as mediated by mirror neurons (Tuomela 2007: Chapter 9). This corresponds to the intentional systems theory perspective, as discussed in endnote 9. Whereas animals manifest collective behaviour as expressions of their genetic endowments and the resulting coordination of stimulus-response patterns,

human beings manifest phenotypic plasticity and hence display a large variety of group behaviour, such as different kinship systems that do not relate to genetic determinants. This coordination of group behaviour requires the capacity to ascribe intentionality, free will and creativity to the human actor. Hence, collective processes establish individuals as actors in order that collective coordination be successful, because this enables survival and growth. The 'illusion of freedom', on such an interpretation, is a necessary evolutionary condition for the coordination of groups (Sommers 2007). A similar argument has been presented by Ross (2011) in his discussion of Hayekian individualism. Ross argues that 'normative individualism' does not require 'descriptive individualism', but, conversely, normative individualism results from collective-level causalities of evolution.

14 This idea is also gaining ground in modern neuroscience. For example, Damasio (2010) focuses on the role of shared *narratives* in constituting the Self. The Self is seen as a developmental structure that is, on the one hand, undergirded by particular brain structures. These structures first coalesce into a stable 'proto self' which is accessible via primordial feelings (180ff.). Transcending the proto self is the core self, which is already constituted by narrative concatenations of images and feelings in the brain. However, this core self develops into full consciousness in the form of the autobiographical self which arranges the more basic patterns into large-scale structures that persist through time. These are primarily non-verbal 'narratives' (203ff.), but they are gradually mediated by memory and symbolic representations that are part of human culture (288ff.). Then, non-verbal 'storytelling' by the brain interacts with 'storytelling' in human communities. The self emerges from these shared narratives, while also being one of their constituents (Ross 2007).

15 We do not use the term 'representation' in order to avoid implicit reference to pre-Wittgensteinian uses of the term 'meaning' as a representation (Lycan 1999: 4ff.). The Hegelian perspective sketched above, which concurs with Wittgenstein's later philosophy, teaches us that all meanings are embodied in actions. Thus the connection with game theory is established: in standard approaches, and specifically in the recent developments in epistemic game theory (e.g. Brandenburger 2007), cognitive processes are seen as purely 'mental' phenomena. This introduces an unnecessary analytical dualism, treating 'common knowledge' as a convergence of the states of mind. As we have seen, the Hegelian approach eschews these views since, to be true, all states of mind must be externalized into actions. This overcomes the conceptual division between actions and mental states. However, one needs to analytically distinguish the cognitive function. Once we do this under the precepts of distributed cognition, what matters are not 'mental states', but actions involving sign systems as external artefacts. The information processed in sign systems is 'environmental information' which need not be analysed in terms of the Shannon's sender–receiver framework (Floridi 2003).

16 This observation is important against the background of Binmore's distinction between the 'game of life' and culture, because it draws on an important distinction made by biologists regarding the criteria of 'altruism' (West *et al.* 2007). Binmore's approach claims to be strictly naturalistic, which means, as we have shown, that the cultural equilibria always need to match with the equilibria in the 'game of life'. This is not tantamount to reductionism, however, but corresponds to our continuity hypothesis because the determination of those 'natural' equilibria is only possible in the cultural process (which, in Binmore's conception, is the bedrock for empathetic preferences – that is, the phenomena of recognition). Interestingly, West *et al.* argue that economic approaches to altruism fail to account for the important biological fact that, given recurrent interactions in structured populations, there is always the possibility that individual sacrifices are outweighed by group-level advantages through time even in the individual-level balance (compare Sober and Wilson 1998). This can generally be interpreted as a version of the folk theorem. But standard economic modelling

confuses the fact that what can be 'economically' altruistic is biologically 'selfish'. This is exactly what Binmore introduces, namely the condition of how the two terms can be made congruent, such that cultural evolution fixes the biological equilibrium. This is perfectly plausible from the perspective of the continuity thesis: human agents who act 'economically rational' as 'rational fools' cannot identify what is their 'naturally' preferred state because they are lacking the rational means to identify this (in other words, having 'mind', we cannot just instinctively act 'naturally'). Only the capacity for culture and the resulting emergence of empathetic preferences (and hence, mutual recognition) can realize the 'naturally preferred' state.

3 The institutional nature of economic action

In this chapter, we are going to demonstrate that the principles of Hegelian philosophy advanced so far (continuity, performativity and recognition), can be reformulated and applied to the fundamentals of economics – that is, the economic explanation of individual behaviour. To do this one should take institutions seriously in this context and look for the ways by which modern economics could accommodate institutional theory based on the Hegelian perspective. In Aoki's model, conjoined with the Searlian perspective on institutions, one central idea is the causal interrelatedness of behavioural dispositions, actions and signs as public representations. Ultimately, the notion of dispositions leads to the consideration of neuronal underpinnings of behaviour, which also remains at the centre of recent developments in neuroeconomics. In the Hegelian view on continuity, consideration of these neuronal underpinnings is indispensable in explaining human action, but this does not imply the necessity of reduction. Therefore, we begin with an analysis of recent developments in neuroeconomics, especially with regard to claims of reducing preferences to neuronal structures. We will then present the opposing claim that preferences are institutions, in the Hegelian sense that subjectivity is actualized by institutions. We conclude the chapter with the exemplary analysis of one of the most important economic institutions: money.

Hegelian metaphysics for modern brain sciences

The ontological foundation of the brain sciences

In this first section, we discuss the avant-garde of current economic research on its interface with brain sciences. This research is foundational for economics because it touches upon ways to approach the notion of the 'individual' and to define mechanisms of choice. We wish to show that reducing economics to brain science is impossible, because *institutions are external facts* constitutive not only of human actions, but also of human individuals as persons. However, as the continuity thesis also applies, the brain sciences are necessary in order to fully understand the behaviour of individual agents.

What can be gained from applying a Hegelian perspective to modern neuroeconomics, cognitive sciences or the brain sciences? Hegel's thinking

might at best be seen as an anachronism by a contemporary economist or cognitive scientist. But let us take a closer look.

On the one hand, Hegel clearly stands in the tradition of German idealism; on the other hand, as we have seen in Chapter 2 (especially endnote 2), he showed a keen interest in the sciences and regarded them as a source of empirical knowledge which philosophy should take seriously. How could an idealist thinker reconcile his philosophy with an empirical orientation of the sciences? We gave a tentative answer in Chapter 2: Hegel's solution was dialectical in the sense of introducing a mediating entity – *spirit* – to account both for human physical and mental activity *and* for the social/institutional structure.

In order to comprehend the real implications of this solution in our context of reflecting upon the relationship between economics and the brain sciences it is worth considering the contribution of a well known twentieth century economist: Hayek. Hayek is important in our context because, on the one hand, he is one of the most influential theorists of both positive and normative individualism in economics, and, on the other hand, he developed alternative approaches to mainstream theorizing, highlighting the role of institutions and culture in explaining economic action, while also paying attention to biological determinants (Hayek 1979: 153ff.). Hayek grounded his views in his unique early contribution to the brain sciences and can be seen as one of the significant (but often neglected) precursors of current neuroeconomic analysis.

In *The Sensory Order* (1952) Hayek presented a philosophical perspective on the brain that is still relevant today and which is increasingly also recognized by brain scientists (overviews in Steele 2002; Basso *et al.* 2010; Ross 2011). Hayek tackled one problem head on: the brain can in no way directly reflect reality in terms of a map that reproduces the world *en miniature*, so to speak. There is a gap between brain and world, because after causal impacts upon the sensory receptors have happened, all that is left are activation patterns in the neuronal system. Once this transformation is accomplished, brain activity becomes entirely self-referential in the sense that the brain processes those initial neuronal patterns further on, merely transforming them into other neuronal patterns of basically the same quality. It means that, in ontological terms, the *world* which we can possibly experience and know *is only conceivable as a pattern of neuronal activity*.

For example, we know that vision is caused by photons hitting receptors of our eyes, but this physical knowledge is only a particular state of neuronal activity of the same quality as a consequence of this causal impact in our brains. These considerations lead Hayek to reconsider the old struggle between realists and idealists; indeed, the world exists 'out there', but we have no reason to believe that the brain produces an accurate picture of the world out of its single material, neuronal activation patterns – that is, essentially distinct from the original causal impacts.

All ontological distinctions between phenomena in the world collapse into one single category: neuronal activation patterns. In fact, there is a reversed

causality here: the brain produces internal patterns that build on sensory inputs, but these patterns are independent from the outside world, beyond the initial patterns at the sensory interfaces, implying that the brain is a *creative entity*. It is able to produce any kind of pattern that is physically possible, given its internal structure and dynamics. The constraints governing internal pattern generation are completely independent from any class of constraints operating on real-world phenomena. In other words, the brain is an *autopoietic system* (in terms of Maturana and Varela, 1980; Roth 1992; Singer 2002: 87ff.).

Hayek developed a theoretical account of how a network of connected neurons might possibly create a map of the world that represents 'reality'.[1] The central process here is '*classification*' (which corresponds to 'concept formation' in modern cognitive science parlance): the brain needs to categorize neuronal patterns in a way that those categories accurately reflect patterns in the world. How is this possible? Modern brain sciences give the same answer as Hayek: this is possible because there is a *feedback loop* between the sensory inputs and the motor outputs, such that the results of motor processes feed back to the brain, and the internal maps of the world are continuously corrected and adapted. This involves the intricate problem that those feedback mechanisms also work via sensory inputs and the neuronal patterns that they cause: every motor output and its results can only be perceived due to sensory inputs, including proprioperceptive ones. This means that there are always two different ways by which the brain can process feedbacks: one is to correct an existing map, the other is to change the categorization of the new sensory data. Or, in an alternative formulation, the brain can *accommodate* maps, or can *assimilate* sensory inputs, which supposedly represent the world (the terms 'assimilation' and 'accommodation' stem from Piaget 1975; for a discussion, see Edelman 2006: 47ff.).

This view has been vindicated by the modern brain sciences, which have characterized the brain as a 'Bayesian machine' engaged in statistical optimization based on different kinds of internal maps that refer to the predictions of actions and the deviations between predictions and results of actions (Friston 2010).[2]

As shown in Figure 3.1, the cognitive process would start with a prediction that refers to internally valued states of the brain relative to realized states; based on this prediction, an action is generated. If the prediction fails, the brain would correct its internal mapping (a picture of reality) in order to improve future predictions. However, the tricky part of this model is that the *perceptions of the errors themselves are dependent upon the mappings*. Then, we have the distinction between *accommodation* (changing the implicit assumptions about statistical distributions reflecting hidden causes – that is, the external causes inaccessible to direct observation by the brain) and *assimilation* (modifying the sensory data so that they match with the inferred causes).

In this model, the motor part of the sensorimotoric feedback loops is essential in endogenizing the environment; yet, it remains a neurophysiological phenomenon: there is no reference whatsoever to the 'real' world, but the brain

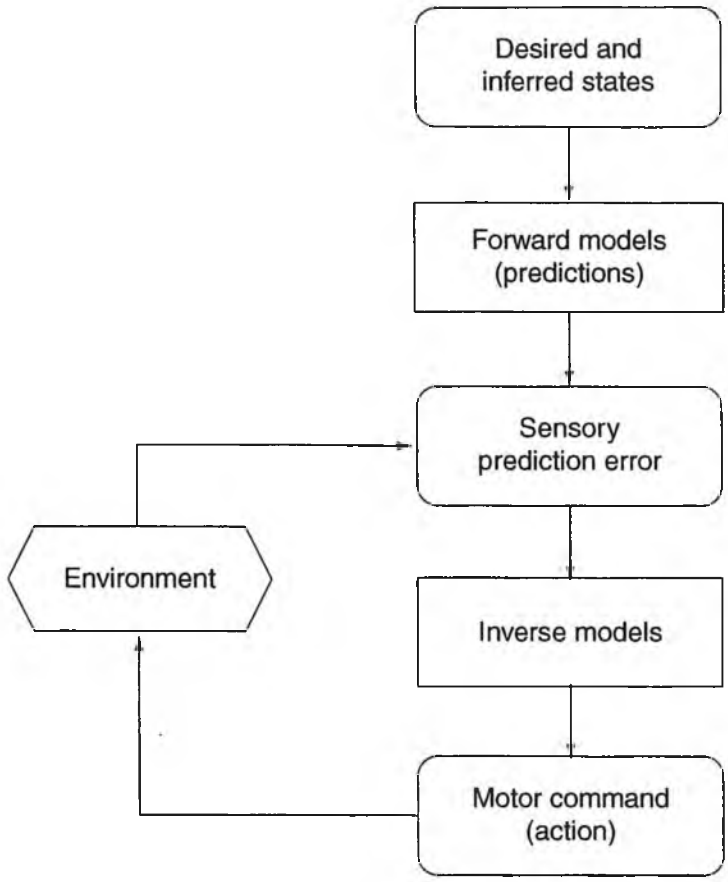

Figure 3.1 The brain as a Bayesian machine (after Friston *et al.* 2010).

only operates in the closed world of inferred – and hence endogenously generated – causal structures which are all in the same material mode, i.e. as neurophysiological facts. Whether these structures represent the real hidden causes in the external world is implicit to the changes in the statistical distributions of neuronal patterns that move towards minimizing statistical prediction error.

Thus, modern brain science closes the conceptual gap between brain and world by approaching the brain via a dynamic framework of sensorimotoric processes – that is, closed circuits of sensory inputs and motor outputs which are in turn processed as inputs. These circuits are the objects that the brain processes, and not simply 'sensory data', as posited by early empiricists and maintained until the twentieth century by positivists and related schools of thoughts. In modern cognitive sciences, this view has been elaborated in theories of '*grounded cognition*' (Pecher and Zwaan 2005; Barsalou 2008). Grounded cognition theorists claim that concept formation in the brain operates via sensorimotoric circuits as objects of categorization (and not external facts reflected in sensory data); this has to be seen as an alternative to the theories which dominated cognitive sciences for so long and which followed a computation paradigm.[3]

Figure 3.2 summarizes the most important insights from theories of grounded cognition for our purposes; we will come back to this basic structure repeatedly. The underlying unit of the human cognitive system is sensorimotoric circuits. These circuits involve external facts in a constitutive way: external facts are not simply 'data', but they are themselves results of action, or, most radically, *external facts are only facts insofar as they involve action* (including perception, such as vision, which is also a kind of action); however, this means that the action is the object. In a similar situation Hegel referred to the 'Absolute': subject and object are integrated into one substance of constituting reality, since the subject expresses itself in action, and only these actions constitute objects; hence, the world is an unfolded subjectivity (Drüe *et al.* 2000: 129).

The sensorimotoric circuits obtain the function of 'internal representations' by simulating motor actions: simulation enables the representation of external facts. If we add more detail, then specialized neuronal systems come into play, in particular the so-called mirror neurons (Fogassi 2011). To this picture, the diagram adds two aspects. The first is the notion of 'affordance' (Gibson 1979) – an action possibility that is part of an external object (a stone might have the affordance of throwing it away); again, this is embodied in a particular kind of neuron: the 'canonical' neurons. In principle, this action possibility can be ascertained by an external observer, yet the affordance remains *actor-relative*. For example, the hammer has an affordance in enabling the action of hammering a nail, but if I lost my arms, this affordance would not exist relative to me. Ultimately all objects of the external world are only cognitively accessible as sets of affordances. Affordances are thus entities that relate subject and object to each other in the pragmatic micro-level framework.

The other aspect is the role of imitation. Grounded cognition involves the simulation of observed actions of others, which in turn can reinforce the simulation of own actions. Simulation as imitation allows the development of 'theory of mind', i.e. representations of the mental states of others. These states are inaccessible, being in fact inferences from simulations based on reverse imitations. Imitation also enables internal simulation and hence information

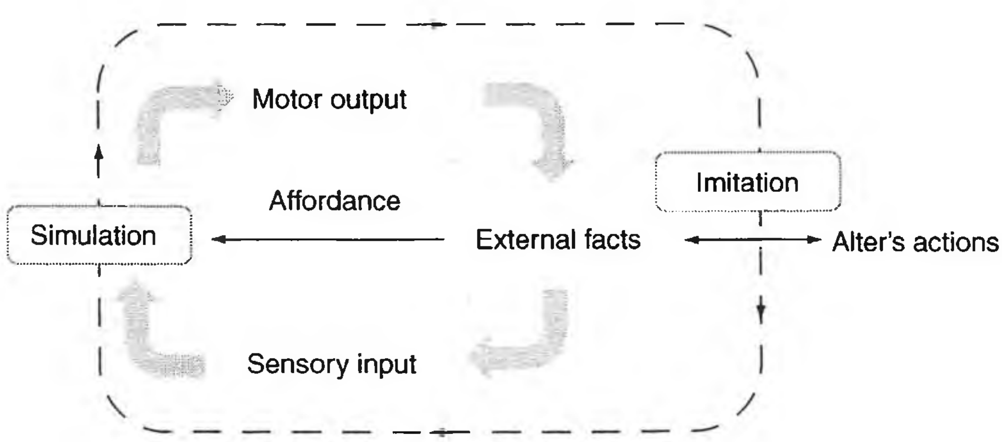

Figure 3.2 The basic structure of grounded cognition.

transmission by copying of actions. We will come back to this theme when discussing the economic theory of preferences. To state the essential point here: this further vindicates Hegel's theory of action insofar as the original 'intention' driving the action is itself a socially constructed medium of interpreting one's own actions. In the grounded cognition approaches, this medium is imitation (see Chapter 2, and endnotes 9 and 13 there).

Theories of grounded cognition thus make the philosophically interesting point that the action part of sensorimotoric circuits refers to action in the external world, and that 'sensory data' do not refer to things 'out there', but to actions upon those things. For the current discussion it suffices to consider action directed at the external world. This action, in turn, is only accessible through neuronal representations of the action.

Now, our claim is that this perspective is Hegelian as it *suspends the still common distinction between an 'inner' brain and the 'outer world'* and abandons the view that there is a simple sensory impact upon the brain in the sense of original 'data'. The brain processes sensorimotoric data as primary units of information, and these are exclusively internal in the physical sense, but externalized in terms of content, insofar as they are actions. This implies that there is an essential difference between what might be regarded as the external data and the representation in the brain.

Thus, human mind is based on ontology of action. This ontology reflects the two Hegelian principles of performativity and continuity: the human brain can only become 'mind' if mental activities are performed as actions on the external world, and by this fact manifest the continuity between internal neurophysiological facts and external occurrences.[4]

Now, Hayek argues that this system operates in a selectionist way: the feedback circuits evolve by some process of error correction relative to the actions and to the valuation principles. Theoretically, one could imagine a situation in which this process comes to an end, which would be a sort of equilibrium state in which new causal impacts of the world would cease to alter the evolved system of maps and representations. Hayek reflects upon this state and posits that in logical terms, this equilibrium would count as a 'tautology': all causal impacts from the outside world would be processed as internal patterns necessarily consistent with all internal maps. The brain would reside in its internal structures like a Leibnizian monade, reflecting the 'true' state of the world in spite of the fact that all the internal representations are generated endogenously. Clearly, this would also presuppose that there are no novelties in the world which might destabilize the brain again, and it excludes the simple entropic decay of brain states which would result in random destabilization. Yet, if we look at the brain in purely formal terms, as Hayek does, we reach the conclusion that there is the conceptual possibility that the world 'vanishes' completely in the self-referential processes of the brain, in the sense that assimilation reigns supremely (for more detail, see Herrmann-Pillath 1992). That would amount to a radically 'idealistic' view on the brain, meaning that the 'world' as 'reality' becomes entirely dependent upon the brain, and there is no

reason to refer to any kind of '*Ding an sich*' beyond the world as constructed by the brain.

This discussion can be related to the 'idealism' Hegel reconciled with realism on the issues of the external world. Stern (2008) argues that Hegel went one step further than Kant in developing the idealistic position: whereas Kant still posits the external world (the '*Ding an sich*'), Hegel questions this and asserts that mind can only refer to mental facts, i.e. that the only sort of existing facts are mental or spiritual, in his parlance. This perspective finds an immediate counterpart in our interpretation of the modern brain sciences: there are no facts other than neuronal facts for the brain. Hegel further gives a developmental account of the structures of knowledge in which the key elements are reflection of the consciousness into itself and its expression of itself in the outer world – that is, *action*. As Stern argues, Hegel is an idealist, but not in the mentalist sense. Mentalist idealism claims that the world is mind-dependent. Hegel is an ontological idealist in stating that the conceptualizations created by the human mind are an inherent and essential part of reality. These concepts are 'real' because they emerge from action in the world, and they ultimately encompass the entire world (this is Hegel's notion of the Absolute).

We can therefore conclude that Hegel's idealism can be given a meaningful interpretation in the context of modern brain sciences. The brain as an autopoietic system and the ontology of neuronal patterns defined by this notion provide the ground for this Hegelian interpretation. This Hegelian interpretation was presaged in Hayek's early approach to the 'Sensory Order' which can therefore be regarded as a stepping stone for providing an alternative view on modern neuroeconomics.[5] Following Hayek, this means to approach institutions as manifestations of cognitive processes that transcend the physical borders of the brain, but which stay in continuity with the brain and its nature. In Hegelian terms, the mind emerges as a 'second nature' of the brain.

Many brains, the sociality of cognition and the impossibility of neuroscience reductionism

Hayek's early account in the *Sensory Order* remained incomplete: he did not deal with the fact of *communication* between brains.[6] We have already seen that the interaction between Ego and Alter plays a pivotal role in modern theories of grounded cognition. We can now give a deeper explanation of this idea. In Hayek's framework, the generation of information and the accumulation of knowledge are only possible as evolutionary processes that work at the population level.[7] Single brains (as we know) can err considerably, hence the mutual checks and balances that emerge in the interaction across brains become essential. This is easy to conceptualize in Figure 3.2: imitation and simulation provide cross-brain feedback circuits, such that prediction errors in one brain would lead to altered actions which influence the diffusion of this action via imitation, leading to reproductions of action patterns, and hence to renewed testing involving statistically independent prediction errors. This argument is

especially important if we consider communicative action, i.e. the use of *language*.

In considering the nature of language, Wittgenstein (1953) argued that meaning requires population-level rules (i.e. the communities of language users), because individuals cannot follow rules that establish meanings on a purely individual basis, as they would be lacking the benchmark: failures in applying the meaning cannot be checked internally. The benchmark can only be fixed with reference to the language uses of others. Then, it is possible to argue that all kinds of symbol systems internal to the brain would only evolve with sustainable information content if they are embedded into webs of interactions across brains. This argument provides a deeper reason why language and internal perceptual symbol systems in humans are so closely integrated. Language provides a special channel for establishing population-level interactions.[8]

Brains thus need to rely on external scaffolds in order to generate stable structures of knowledge; these scaffolds need to be co-constructed with other brains, because only this provides the necessary stability for the scaffolds (for an economic reception of this notion of 'scaffolding', see North 2005). Then, the Hegelian principles of continuity and recognition come into full play: the continuity thesis in the context of neuroscience implies that communication between brains is always mediated by neuronal structures, and that the scaffolds are, in turn, physical structures. So, we move from the autopoietic brain to autopoietic communities of brains (compare Herrmann-Pillath 2010/11: 64ff.). In this movement, recognition is essential, as the stability of the scaffolds on which knowledge structures are erected depends upon mutual recognition within the communities of brains. This is most clearly represented by human language: even though the meaning of words can be expressively manipulated by single speakers, meaning is ultimately only constituted by the recognition of others, and vice versa. However, the Hegelian recognition principle is much more encompassing: following the grounded cognition approach, all human action patterns evolve due to the mutual recognition of these patterns in relationships of imitation and observing one's own actions.

There is a remarkable parallel to the Hegelian transformation of 'subjective' into 'objective spirit' here. 'Objective spirit' would correspond to the population-level processes in connected systems of brains: these processes are embodied, among many other phenomena, in the physical structures of linguistic artefacts, objects of the arts or human technology. 'Objective spirit' builds on connected sensorimotoric feedback loops in populations of brains mediated by artefacts that emerge due to human action. This is vindicated by the modern approach to distributed cognition, as elaborated in Chapter 2. Of course, Hegel could not develop this view, lacking any idea about brain functioning. But the general idea can be formulated on a more abstract level independent from any particular knowledge about neuronal processes: the growth of knowledge proceeds by the formation of increasingly complex collectively coordinated action patterns mediated by artefacts produced by these actions. Then, we cannot say that this knowledge just 'represents' the world, but that, following the performativity

thesis, the knowledge *is* the action patterns – that is, the Hegelian objective spirit.[9]

As a result of this discussion, we can appraise recent neuroeconomic and behavioural economics research in a new way. The Hegelian perspective sketched above posits that the synthesis between neuroscience and economics is only possible if the central role of external phenomena for enabling brain processes is recognized. Neuronal structures embody causal chains relating individuals to the world by their behaviour, but these chains always and essentially involve external phenomena – that is, a neuroscience explanation always needs to be formulated in terms of a particular neuronal mechanism *and* a particular external fact. External facts, as we have seen, are *actions* of the organism. By implication, this view *rejects the idea that behaviour can be fully reduced to neuronal mechanisms.*

We can develop a more general conclusion along the lines of Figure 3.3. In modern philosophy of mind, there are two possible approaches to the relationship between brain, mind and world: internalism and externalism (or, in a more technical way, the distinction between 'narrow' and 'wide' mental content; see Brown 2011). The Hegelian view overcomes the limitations of current neuroeconomic reductionism, which would one-sidedly emphasize the role of internal neuronal structures in understanding human behaviour. The principle of performativity emphasizes the role of external facts and thus seems to vindicate externalism. However, we argue that *the Hegelian view offers a synthesis between the two perspectives of internalism and externalism*, insofar as action is always a movement that involves both sides. This is already evident from the ambiguities of the two terms.

Internalism posits that there is always a significant contribution of internal states of the brain in developing knowledge about the world which is reflected in analytical categories such as 'meaning'. The primordial phenomenon in the brain sciences that lends support to internalism is consciousness and the experience of 'I' (overview in van Gulick 2011). However, internalism can be elaborated in two entirely different ways. One track leads to the humanities and is clearly anti-reductionist. The human capacity for producing and perceiving meanings which originates in subjectivity can be depicted as staying in radical tension with neuroscience reduction. But the second track in internalism is represented precisely by this reductionism, in the shape of 'neuro-internalism'. If neuroscientists aim at reducing utility to the facts of neuroscience, it means that internal brain structures would assume a primordial role (Ross 2011). Considering these two tracks, what actually unifies them is the assumption of 'individualism' (Wilson 2004: Chapter 4), because these various kinds of generic internalisms share the idea that the individual is an irreducible source of autonomous causal powers (compare our discussion of causality in Chapter 1, endnote 6).

Seeing internalism as individualism, we can discern two versions of neuro-internalism in today's economics, both of which stay in opposition to the formal mathematical internalism as individualism of subjective preferences. One would

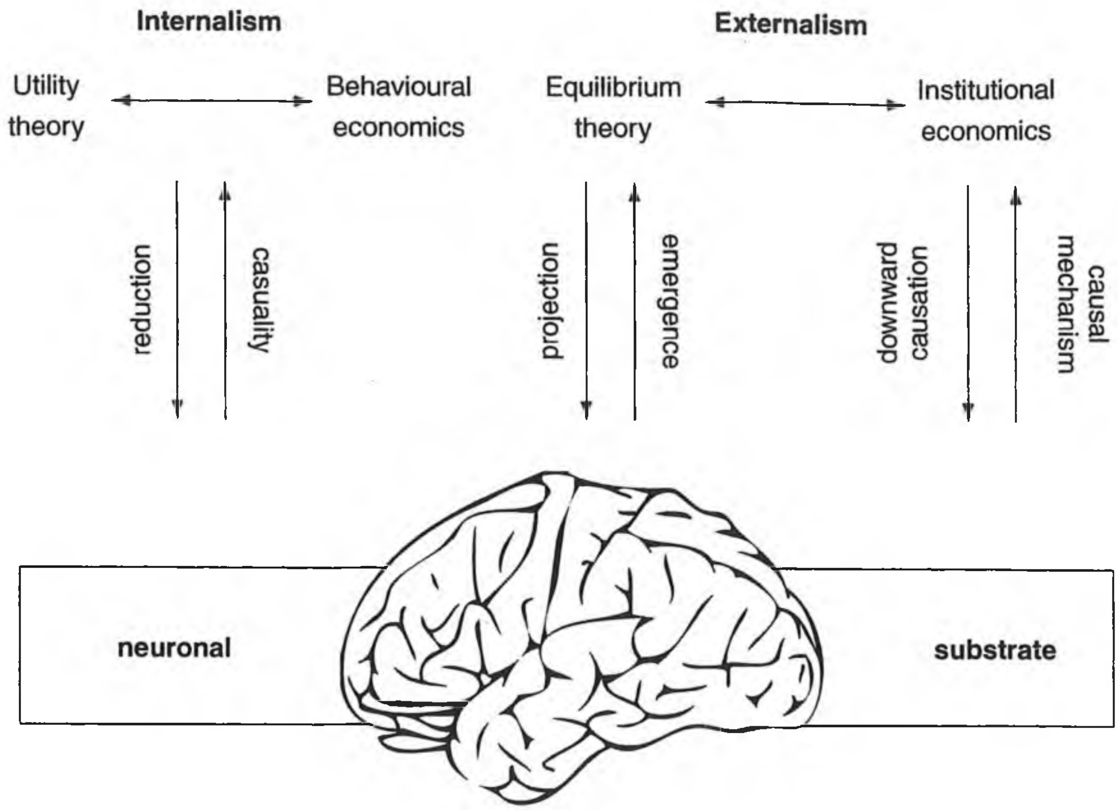

Figure 3.3 Internalism, externalism and economic theories.

reduce the economic concept of subjective utility to neuronal phenomena, thus annulling the subjectivist turn of the early twentieth century, which achieved precisely the opposite – that is, rescinding psychological explanations and leaving the origin of subjective preferences out of the scope of economic explanations (Glimcher 2011); the other is the fusion between neuroscience and behavioural economics, rethinking the rationality axioms and claiming that certain neuronal mechanisms simply do not work this way (Camerer *et al.* 2005). However, in spite of the seeming tension between the two programs, they are both reductionist and are at odds with hermeneutic theories which are prevalent in anti-reductionist approaches to subjectivity, reject reductionism in terms of universal causal laws, and put the ontological uniqueness of the individual at the centre. However, in economics hermeneutic theories remain marginal (see, for example, Mayhew 1994), so we do not consider them in Figure 3.3. However, as we note, this is an opposition that refers to methods, but is actually grounded in a shared view on generic internalism – that is, tracing back the origins of action to internal sources of the individual, and the resulting individualism.

The non-reductionist approaches to subjectivity could be also given an entirely different, *externalist* interpretation. Obviously, this also implies a rejection of individualism. We could follow the already familiar Hegelian line of argument: consciousness and the self are inherently social phenomena. The

stable structures of subjectivity can only be established in and by actions, and actions (especially those involving meanings) necessarily depend on others. Thus subjectivity cannot be understood only in internalist terms, even though people think that subjectivity is 'inner' to human beings.

In economics, this intricate question has not been raised so far. Most economists stick to the internalist position, maintaining methodological individualism. If all social phenomena have to be reduced to individual behaviour, the necessary consequence is that deeper causal explanations have to be internalist ones. However, there are two alternatives within economics (Figure 3.3). The first was developed by Don Ross (2005, 2008), extending on and modifying related arguments by Mirowski (2002). This is the view that economic theory describes systems of interacting agents, and that there is no necessary presumption that those agents are human individuals (this implies that subjective utility theory in this context, though being a part of equilibrium theory, has an entirely different meaning than in the internalist setting). In this view, the nature of agents is determined by the model of the system. It is the self-regulating adaptive complex system in which agents (as 'moments' of the Hegelian totality) are selected that manifests certain properties such as optimization. Agents can be represented by many different physical entities, which can be both super- and supra-individual. In the latter case, agents can be simple neuronal mechanisms that play together in the human brain.

This means that economics cannot be reduced to neuroscience, but that neuroscience can be seen as a possible application of economics, and that economics describes emergent complex systems of human interaction on another level of complexity. Then, the question of whether a particular entity is indeed an 'economic agent' can be answered by empirical methods, which is exactly what is done by behavioural and experimental economists. However, if certain axioms of economics are refuted in their research, this does not falsify economic theory, but only provides evidence that it was wrongly applied, especially in the sense that methodological individualism is a false proposition. Economic agents in this sense are not human individuals, but are possibly parts of human individuals or certain higher-level entities, such as firms.

Apart from the two versions of internalism in economics and Ross's approach to externalism there is a fourth, Hegelian, alternative, suggesting a synthesis of neuroscience and institutional economics. The Hegelian view takes the critical analysis of Ross as a point of departure and asks how we can conceive of human individuals if they are not economic agents in the sense of equilibrium theory.[10] This view can be conjoined with the externalist analysis of subjectivity. Then, human individuals are seen as being defined in terms of their action patterns relative to external facts, i.e. other individuals and structures of objective spirit. That would lead to the *explicit consideration of institutions and culture*. So, we reach what is at first sight a surprising conclusion (which, however, reflects the same ambiguity of terms as in the case of internalism): the externalist approach would normally be associated with a naturalistic approach in terms of the sciences; but now we realize that what is usually coined as humanities

(*Geisteswissenschaften*) or the cultural sciences (*Kulturwissenschaften*) can be an externalist program treating facts of culture as institutional facts (Searle 1995). Hegelian social theory would encompass both the sciences and the *Geisteswissenschaften* in terms of externalism; eventually, this overcomes the dualism of internalism and externalism in the Hegelian movement from subjectivity to the objective spirit. Or, in other words, it is the external scaffolds of creativity (externalism) that also enable the irreducible expression of individual freedom (internalism). This also implies that the facts of *Geisteswissenschaften* cannot be reduced to neuroscience facts. Neuroscience remains incomplete without considering the external facts of what Hegel denotes as 'objective spirit' – thus paving the way to the sociality of cognition.

So, reflecting upon a Hegelian metaphysics for the neurosciences, we end up with the insight that the natural partner of the neurosciences in economics is not equilibrium theory, but rather institutional economics in the broadest sense, including the non-neoclassical variants such as 'old American institutionalism', especially of the Veblenian brand (Herrmann-Pillath 2009). With reference to behavioural economics, it is not enough to state the contradictions between rationality assumptions and observed behaviours. The further question is whether there are certain configurations of institutions and neuroscience facts, within which economic theory can be successfully applied to the behaviour of individuals as economic agents.

In the subsequent two sections of this chapter, we will approach these questions from two angles. The first is to develop the discussion of reductionism by analysing the Hegelian approach to the basic microeconomic category of *preferences*. We shall argue that preferences are not 'inside' people but are institutionalized patterns of behaviour. In short, *preferences are institutions*. The second is to explore the key macroeconomic and institutional phenomenon, *money*, from the viewpoint of the Hegelian approach to economics.

Preferences, institutions and identity

The role of externalized concepts in neuronal mechanisms of choice

The most advanced approach to neuroeconomic reductionism has been developed by Glimcher (2011). Looking at Glimcher's model in more detail, it is critical to recognize that modern neuroscience explains current valuations of choices and their alternatives as the results of a learning process. Learning always involves interactions with the external environment and categorization, hence concept formation. Our previous notions are all at work here: the interaction between environment and neuronal structures reflects the continuity principle, sensorimotoric processes embody the performativity of action, and the performativity of action rests upon intersubjective recognition, which provides the basis for concept formation in populations of brains. Then, individual learning is only possible as *social learning*, and internal concepts of neuronal systems are actualized in population-level physical patterns of actions.

In the most general form, the tension faced by behavioural economics and neuroeconomics lies between 'conscious' decisions and spontaneous choices influenced by factors of which the decision makers are not aware. The methodological difficulty in this approach resides in the fuzziness of the notion of 'consciousness', because, for example, in the vast majority of experiments the participants would be well aware of the decisions they take. Then, the standard argument runs that the 'errors' represent internal mechanisms contradicting a description of agency imposed upon them by the outside observer (and not just losses of failures of conscious control evaluated by the subjects themselves). This implies that most of the research in neuroeconomics and behavioural economics appears to be *normative* in the sense that it is driven by the contradiction between predictions and observations, and that predictions are based on a theory that has not been previously extracted from empirical research but deduced from the original axiomatic economic theories.

Such an approach is partly misleading in dealing with the interaction between concepts and neuronal processes. This issue is different from referring to 'consciousness' or 'rationality'.[11] The adaptation of neuronal mechanisms to external environments can be also seen in the way that cognitive functions themselves are essentially *externalized*. Interestingly, this view has also emerged in a different strand of experimental economics, namely that associated with the name of Vernon Smith (Smith 2003; Plott and Smith 2008). When the Nobel award was bestowed on both Kahneman and Smith, in effect the two positions of internalism and externalism have been implicitly recognized.[12] Whereas Kahneman clearly adopts an individualistic methodology without necessarily searching for further steps in neuroeconomic reductionism, Smith draws an entirely different conclusion from his research on experimental markets: in them, the properties of individuals do not matter at all in explaining the results, even including the possibility of 'zero intelligence agents'; what counts are the *institutional settings* in which the agents operate.

We can extend Smith's 'ecological' approach to rationality in arguing that institutions also include all aspects of *representation* (as we have elaborated in Chapter 2 on the Aoki model). In behavioural economics, this refers to the notion of 'framing'. Framing denotes the decisive role of conceptual representations in determining the behaviour of individuals. In experiments, these frames are manipulated at will by the experimenter. In the real world, the frames are part and parcel of the institutions that govern the behaviour of individuals: this has recently been recognized in the renewed emphasis upon 'ideas' in analysing institutions in real-world societies (for an influential view, see Blyth 2002, 2011; also see Chapter 4). This differs from the standard view in economics, which analyses institutions in terms of incentives: the new approach sees frames which channel behaviour as inherent elements of any institution. But it also means that institutions obtain an immediately cognitive function which is consistent with Hayek's approach.[13]

Let us take a closer look at Glimcher's (2011) reductionist model of choice in order to identify the role of concepts as frames in a concise formal setting. In this model, choice is primarily seen as being driven by expected subjective value and by the corresponding deviations between realized value and expectations (393ff.). This assumption is based on reward prediction error (RPE) theory, which is founded on thorough neuroscientific evidence regarding the mechanisms of valuation and which focuses on the role of the neurotransmitter dopamine. This mechanism is phylogenetically old, and therefore seems to come close to a biological universal. The basic principle is that dopamine levels in the brain signal errors in predicting reward, with positive errors causing higher levels. Dopamine is a physiological reward, so RPE can be seen as a most general mechanism of valuation. The physiological details are not relevant in the current context.

What is the 'reward prediction error'? The point is that 'error' can only be defined relative to the cognitive process that constructs the predictions (as previously demonstrated in Figure 3.1). Glimcher measures RPE as the difference between what is called 'experienced value' ExperSV and the discounted expected subjective value ESV. The formula which defines the reward prediction error is:

$$RPE = (ExperSV - ESV_{forecast})$$

In turn, the subjective value SV is the result of a learning process, in which the subjective values adapt in $t+1$ according to the formula:

$$SV_{j(t+1)} = SV_{jt} + \alpha RPE_t$$

which is recursive – that is, it applies for SV_{jt} in the same way, showing that subjective value is exclusively based on the RPE theory about the dopaminergic circuits in the brain. All subjective value is deeply related to the learning processes through time and to the mechanisms that generate expectations. To give a simple example: the subjective value of an apple is not directly related to intrinsic properties of the apple such as vitamins and nutrients, but to the experienced distance between our expected subjective value of the apple and the actualized value when eating it. So, if we had certain expectations about the subjective value of a particular sort of apple, and we were positively surprised about the taste after eating it, the subjective value of that apple increases. The same apple has different subjective values for the same person, with the same biological characteristics depending upon the state of expectations.

The neuro-reductionist argument posits that this notion of subjective value reduces the economic notion of utility in the sense that both are linearly correlated. It is important to recognize that this adds substantial content to the original notion of subjective utility, for subjective value involves the learning process. This also applies for the role of probabilities, because Glimcher argues

that the frequentist and implicit notion of probability is inherent in the subjective value. The argument becomes more tricky when further considering the formula for the *RPE*, because the *ESV* term is complex as it involves predicted *ESV*s, in a discrete setting:

$$ESV_{forecast} = SV_t + \gamma^1 ESV_{t+1} + \gamma^2 ESV_{t+2} + \gamma^3 ESV_{t+3} \ldots$$

That is, predictions are not about realized *SV*s. So, considering the consumption of an apple, the degree of my surprise about the actual taste depends on what expectations I had formed regarding my *future expectations* of taste, i.e. my future predictions. At each moment in time, I anticipate what my expected subjective values will be, and these values are discounted and summed up to arrive at my current *ESV*.

For the *ESV*, the basic formula applies:

$$ESV = g[(ExperSV - SV_{forecast}), (state)]$$

In which the *ExperSV* is defined according to:

$$ExperSV_{jt} = f_j(x_j) - \beta_{jt}$$

Here, *ExperSV* is a most abstract magnitude that binds certain quantities of a good x_j to a state of the neuronal system, typically rates of firing of particular neuron groups. This, however, is not taken as an absolute value, but is corrected by the reference to a baseline value β which is a reference point. This importance of context is also highlighted in the previous formula, where the state of the organism is explicitly recognized (e.g. the degree of actual vitamin deficiency relative to the situation of eating apples). Then, the *ESV* results from the difference between which *SV* had been predicted and which *SV* was experienced. As we have seen, this prediction of *SV* involves the prediction of future reward prediction errors, which in turn relate to expectations about future expected values.

This model is deeply problematic from a philosophical perspective. What is important here is simply the fact that expectations about future expectations are self-referential and require concept formation in order to become possible. How can the brain project future expected values which would at least include, as we have seen, projections about future reference points? So, the difficulty is that behind a seemingly simple structure, there are complicated issues of the computability of all model parameters which turn endogenous if one considers the complete process of prediction.

However, what is even more important in our context is that the notion of expected value explicitly refers to *symbolic representations* (Glimcher 2011: 403). This means that in the explanation of human behaviour *framing effects* occur (confirmed in experimental economics, and reflected in Glimcher's own account of

prospect theory as well). Reference points are dependent upon conceptual structures that represent the choice environment. Besides, *concepts* are involved in mediating between subjective values and expectations (such as different representations of probabilities; see endnote 13) Both observations suffice to demonstrate that Glimcher's model cannot be reductionist, contrary to his own claims.

In what appears to be a very fruitful methodological distinction, Ross (2012) argues that there are 'molar' and 'molecular' levels of analysing human choice. Glimcher's approach operates on the molecular level – that is, it raises reductionist claims and aims at directly explaining choice by observing neuronal mechanisms. Molar explanations, in contrast, refer to the higher-level conceptual constructs mediating between these mechanisms and choice. As we have seen previously, these constructs are externalized structures which are not neuroscience facts but facts about institutions in the most general sense, such as rules governing the meanings of concepts. So, the molar model is something to be adopted in the fusion of institutional economics and neuroscience, as depicted in Figure 3.3. While Glimcher's model describes single mechanisms undergirding human choice, observed choice can only be fully explained when including external conceptual structures.

We suggest that a model of choice should refer to human individuals as persons and involve the account of institutions. Brains are hereby responsible for the mechanisms of valuation, feelings, emotions and certain sets of cognitive capacities, while institutions enable the functional reference of brain processes and the conceptual structures underlying the learning processes. As we argued in Chapter 2, one notion that can bridge brains and institutions is the notion of the 'identity' of persons. We will now show that this conceptualization enables us to give a richer picture of individual behaviour with an eye on modern economic analysis, while drawing on the Hegelian principles developed in Chapter 2. In order to achieve this, we need to explore the concept of *identity* in more detail. After all,

> [i]t is individuals' claim to the intersubjective recognition of their identity that is built into social life from the very beginning as a moral tension … and … gradually leads – via the negative path of recurring stages of conflict – to a state of communicatively lived freedom.
>
> (Honneth 1995: 5)

Identity and behaviour

Identity is an important analytical category in modern ontology (for an overview, see Noonan 2011). As such, it is not confined only to applications in the context of human behaviour, where it mostly pops up in the context of social psychology and sociology. Philosophically, the question of identity is often paired with the notion of existence. We will not explore the deeper issues here, while drawing on these more foundational concerns.

In the most general ontological context, issues of identity emerge in the definition of a 'thing'. A thing is an entity that needs to be *identified* in space-time, which requires certain criteria for identifying it as stable through time, in the sense that different moments of time mark not different things, but temporal states of the same thing; further, a thing needs to be separated from other things. So, for example, if we look at a rock in the mountains, the question is whether this rock is separate from the entire geological formation of which it is a part, and whether the rock remains the same in spite of ongoing erosion.

The issues raised are certainly also of interest for dealing with human individuals. For example, in some views of modern biology (such as Dawkins 1989) individual organisms are just external constructs of genetic structures, which in turn are shared across organisms and connect organisms through time. Then, in explanations of behaviour we might actually reduce observed actions to genetic structures which manifest different boundaries than organisms.

In the Hegelian view, the central normative category of freedom refers to individuals. At the same time, however, individuals as persons are only fully established in the context of groups that manifest certain institutions, or structures of objective spirit. While every brain is a unique neuronal structure defining an individual in physical terms (Edelman 2006: 55), this is not enough for dealing with the status of human persons as having a purpose in life, personal histories, and so forth, because we cannot establish the causal linkage between those neuronal structures and the events of their personal life without the intermediation of institutions. Therefore, in establishing the identity of persons, the three Hegelian principles apply: the physical uniqueness of individual brains remains in continuity with the singularity of human persons; these persons unfold through time in their expressive actions; and thus they perform themselves and rely upon mutual recognition in the social context.

These considerations prompt us to conclude that economic theory can only provide a reliable ontological framework for the identity of individuals if it adopts the view that human behaviour is shaped by institutions. As we will show in the next section, this means that the notion of preferences becomes empirically meaningful if we approach preferences themselves as institutions. This position rejects internalist approaches, but actually supports the perspective on preferences as a mathematical structure describing the observed behaviour of people under certain constraints that does not refer to any internal psychological determinant. However, in this mathematical approach we cannot provide any criterion for the identity of the individuals that are supposed to manifest this behaviour. This criterion can only be provided by reference to institutions.

There are two main ontological criteria for fixing the identity of individuals: re-identification and individuation (for an extensive treatment, see Davis 2003). Individuation refers to the criteria by which an individual can be

unequivocally determined as being different from other individuals. Re-identification means that an individual can be identified and identifies herself as the same individual through time. Both criteria are necessary to establish the identity of an individual, because, for example, re-identification requires a stable reference to one particular individual as being different from others. If economic theory cannot provide reliable criteria for identity its theoretical propositions turn out to be empirically hollow because it would be always possible to refute falsifications in changing the reference to the individual in question. That happens, for example, if behavioural economists argue the real individuals do not behave according to the standard economic model, whereas neuroeconomists such as Glimcher claim that single neuronal mechanisms do.

Davis provides sophisticated arguments about the relevance of the two dimensions of identity with respect to different economic theories. In particular, he shows that the failure to provide criteria for identity applies to all versions of internalist interpretations of economic behaviour (Davis 2010),[14] and to both standard rational choice models and behavioural economics. Interestingly, in the latter case we also meet a straightforward normative interpretation of the standard approach: if behavioural economists show that people usually do not behave rationally, they also argue that agents can be 'nudged' into behaving rationally, implying that certain experts design an environment of decision-making in which people actually behave rationally. This means that we can no longer provide a clear criterion for identity (Davis 2010: 61ff.). First, the 'nudging' theory means that important parts of cognitive functions are actually externalized into social structures (such as experts and environmental designs); second, the individuals cannot be re-identified through time as they behave differently depending upon the changes to those structures.

This argument shows that behavioural economics actually works as an externalist theory despite adopting an internalist methodology. However, this externalist theory cannot provide a criterion for identity. This is also true for the approaches that are consistently externalist in interpreting the economic model, because they lack causal theories that explain observed behaviour. If we describe certain choices as outcomes of rational deliberation, we cannot provide a necessary criterion for why those preferences are stable through time. Philosophically, this criterion has been well established in Kripke's (1980) theory of identity, which highlights the role of causal chains leading back to the initial point at which an individual came into existence. We have two different possible ways by which these causal histories can be accounted for: memory, and observations by an external party.

Memory refers to a reflective self-identification. In comparison, the external observer might identify a causal chain that leads back to the point of origin without necessarily presupposing that this causal chain is known to the individual in question. This applies for all kinds of individuals in the ontological sense, such as this laptop on which we write this book: we can trace the existence of this entity back to the time when it was assembled, for instance. However, in

the case of human beings some of the causes that we need to refer to are, at first sight, internal, because a process of interpreting external events is involved. Therefore we end up with a paradox, because the external observer would have to take the internal position in order to explain the entire causal chain (for example, if different children were beaten by their parents in the past, this may result in different reactions depending upon the interpretations of the children). However, this already presupposes the identification, in the sense that it is not yet fixed, which the location and the scope of this internal position are. On the other hand, the observer might assume that all determinants of internal interpretations are external. But in this case the identification fails right from the onset of the reconstruction (for example, there might be interpretive acts by the foetus).

We face the same problem when considering memory. In this case, we would adopt the internalist view in dealing with externalized descriptions of memory. Then, for example, even if an individual radically changes her identity we would be able to fix the identity in the memory of the individual that includes this event. However, individual memory cannot operate without the intermediation of *symbolic media* that represent the past to the present states of the individual. These symbolic media, however, are themselves not individual states as their meaning can only be established by *collectively embodied processes*, as we have already stated. So, they are external facts and causes of certain states of memory. For example, take an individual that changes her gender identity. She memorizes that she was a male previously; however, this description of 'male' cannot be established without reference to social categories in which the reference to maleness is enabled. This is the only way for her to memorize that she was previously a male, and hence establish the causal chain that also includes the change of her gender identity. And what were the famous madeleines which aroused memories in Proust's Swann if not a socially laden object?

Identity can be conceptualized as involving two different dimensions: the social identity, as established by interpersonal categorizations that frame the individual memory and perception of oneself as external facts, and the personal identity, which represents the causal chains mediated by memory and leading towards the distinctiveness of the individual relative to all other individuals. This, again, follows Davis (2003, 2010; compare Herrmann-Pillath 2012b on the 'cross of identity').[15] A causal account of identity cannot be established by mere references to events that are themselves unequivocal to external observers, because all causal accounts involve individual memories actualized by symbolic media. This could be reformulated as a proposition that *personal identities are narratives*, or individualized verbal causal histories.

Why is a narrative constitutive for personal identity? This is not related to the specific content of the narrative, but to the fact that a narrative creates a deontology. Identity is a *norm* to which the individual adheres, because otherwise it would fragment into a mere disordered collection of desires and motives for actions which does not provide the continuity of the person through time and across contexts. This norm is necessary to establish the capacity for

social interaction; it cannot be established merely on subjectivity, but also presupposes sociality. In social interactions, people need to assume identities because otherwise the interaction itself would collapse – that is, the precondition for their existence as persons (Ross 2005: 285ff.; 2007). This functional requirement translates into individual commitments to identities, so that identity becomes a norm.

These contemporary discussions find an important counterpart in the *Philosophy of Right*. In the 'Morality' chapter Hegel develops the concept of subjectivity which he needs in order to provide a foundation for modern individualism. In particular, he evokes '*the right of the subjective will*', meaning that 'the will can recognize something or *be* something only in so far as that thing is *its own*, and in so far as the will is present to itself in it as subjectivity' (PR: 136). Not only is the concept of recognition at work here, thus signalling a reference to the institutional reality of *Sittlichkeit*, but also the idea of externalization since, as Hegel claims elsewhere, '[w]hat the subject *is, is the series of its actions*' (PR: 151).

A conclusion we draw is that all human behaviour is institutionalized, in the sense of Chapter 2, because *the identity of individuals as persons is necessarily based on externalized media and their normative structures* – or, to put it briefly, identity is rooted in institutions. Only by adopting institutionally bound behaviour can the identity of actors be established, even in terms of self-identification. Moreover, it is *recognition* that establishes the social ontology of identity. This also implies that in expressive action, individuals *perform* their identities as persons.

From these general philosophical observations we can now move on to a more focused analysis which reconsiders the economic concept of preferences as institutionally bound actions.

Preferences as institutions

The approach to identity sketched above implies that individual preferences cannot be interpreted in the internalist way. Let us refer to the concepts of *subjectivity* and *stability of preferences*, wherein stability implies identity and identity, as the inalienable core of the person, establishes subjectivity. The latter is not to be seen in internalist terms, but rather as being rooted in human sociality. Then, to establish 'subjectivity' amounts to unequivocally identifying an individual as separate from others through socially mediated means of expressing one's own identity, while 'stability' is the fact that the individual remains the same through time, as is reflected in personal narratives. Consequently, the preferences of a certain person at a certain point in time are essentially *normative*.

Interestingly, this idea does not contradict the externalist interpretation of the revealed preference axioms, which is a methodologically safe way to maintain the economic notions of preferences against the overwhelming evidence of behaviour that remains in conflict with the standard model of rationality. In the

revealed preferences approach, preferences are only mathematical descriptions of observed behaviours and cannot be given any additional ontological status beyond this observed behaviour. If we regard behaviour as institutionally bounded, then we merely state that preferences, insofar as they define an individual, are external regularities in behaviour which are normative. Hence, *a preference is an institution.* The great methodological advantage of this view is that we grasp the ambiguity of economics vacillating between the positive and the normative meaning of rationality. If we interpret preferences in the externalist way as institutions, *preferences obtain the status of norms*, and rationality means to manifest behaviour that is consistent with those norms. This shift of perspective on rationality has been also emphasized in the recent appropriations of Hegelian philosophy, in particular by Pippin (2008).

Our approach thus reproduces the externalism of the standard theory of revealed preferences, but leads to a shift in interpreting the empirical observations. Both subjectivity and stability of preferences are seen as normative phenomena that are rooted in the sociality of individual agents.

This also means, in the most simple terms, that rationality is turned normatively, in the sense of providing a definition of rationality by which the notion of preferences is internally characterized within the model (in the sense of structuralist philosophy of science; see Stegmüller 1986, Hausman 1992, and Chapter 1, endnote 4). The normative aspect of rationality is concretized by the theory–reality relationships: criteria for rationality, such as consistency or transitivity, become parts of the internal definition of what preferences are. In other words, if the observed behaviour of people does not show these properties, it means that the observer has simply mis-specified the institutional setting within which the normative power of preferences is grounded. This idea has often been illustrated by the observation that the standard formal model of choice can easily be rendered tautological, but this actually does not jeopardize its use since it reflects a misunderstanding of the underlying theoretical structures. However, in the standard approach this mostly boils down to the idea that some elements of choice have been mis-specified or overlooked. In our view, the empirical mis-specification must be located in the description of the institutions.

In empirical terms, this means that the decisive question is which observed behaviours in the real world take place in an institutional setting such that the preferences – normatively assigned to the agents – correspond to the economic model. Then, the 'economic agent' turns out to be a system-level phenomenon in the same way as 'persons' are institutional phenomena. This is the reason why, for example, the 'gambler' in early English finance could turn into the figure of the 'investor' operating in a 'scientific' setting of finance in the nineteenth century (Preda 2005). Another example is the transformation of the European household into a unit that focuses on earning pecuniary incomes aiming at consumption of market-traded material goods during the 'Industrious revolution', as described by De Vries (2008). In all these contexts, the economic model does not aim primarily at explaining internal causes of human action, but serves to identify external drivers of institutionalized behaviour. We have already

encountered this idea in the experimental markets literature, in which the efficiency of market outcomes is not determined by the internal properties of market agents, but only by the market rules. If these rules lead to the desired outcomes, we can apply the economic model 'as if' the agents were rational in the way prescribed by the theory.

The idea that preferences are institutions can be further supported by evidence from behavioural and experimental economics.

First, *preferences* are not a given in the process of choice, but *emerge from observed own choices* (Ariely and Norton 2007). This has been dubbed 'self-herding' and 'coherent arbitrariness' (Ariely *et al.* 2006). This means that individuals start out from arbitrary determinants of preferences, but later strive to maintain consistency in their choices. Thus, the axiomatic properties of preferences in economics are, in fact, properties of preferences evolving through time and assume a normative status of their own, but they are not properties of the primordial preferences, if only in the sense of meta-preferences about rationality, i.e. as a formal norm independent from the actual content of the preferences. In these experiments, people actually learn about 'their' preferences without actually entering into the process of preference formation with pre-fixed preferences. They observe what they do, and they transform those observed preferences into normatively appropriate patterns. Then, it is straightforward to argue that observed choices actually reflect a learning process that is also scaffolded by all sorts of external determinants of what are to be identified as 'preferences'. One interesting consequence of this, which we will explore in the next section, is that prices have a direct impact upon individual values, insofar as they operate as external anchors of individual valuations.[16]

Second, individuals always *consume goods and concepts of goods* (Ariely and Norton 2009 call this 'conceptual consumption'). There are two possible interpretations of this phenomenon. One is the more cautious claim that people consume ideas of things, such as when enjoying a fancy car or watching a movie. The second, which we adopt, is based on the theories of grounded cognition and claims that every act of consumption is an act of consuming 'perceptual symbols' (Barsalou 1999), which can be represented as the sensorimotoric pattern of cognition. Indeed, we argue that these perceptual symbols underlie the bodily action that is motivated by the perception of a consumption good.

For example, if we see a delicious apple and decide to eat it, this is conceptual consumption enmeshed with actual consumption because our physical action is embedded in percepts that are not simply representations of the apple as an object, but that also reflect past consumption activities. Hence, we consume representations of consumption acts (for exemplary related experimental and neuroscientific evidence, see: Wilcox *et al.* 2009; Morewedge *et al.* 2010; Wagner *et al.* 2011). A neuronal aspect of this process is based on the brain structures of our motivation systems, especially the dopaminergic circuits. The activation of these circuits is independent from the satisfaction actually generated by the intake of nutrients, vitamins and other substances that we receive with the apple. Thus, we can say that the 'utility' generated by the consumption of the

apple is conceptual consumption, with reference to the perceptual symbols activated by eating the apple and changing dopamine levels in the brain (compare the previous discussion of Glimcher's model). The principles of continuity and performativity are also at work here, since we can identify the neuronal substrate of consumption activities, but we cannot close the causal circuits without considering the involvement of conceptual structures that enable expressive action.[17]

This approach to conceptual consumption is also important in realizing the role of imitation in the formation of preferences. We have already highlighted this role in the analysis of grounded cognition. Insofar as consumption is mediated by perceptual symbols, this also includes the consumption activities of others whom we observe or have observed in the past. This straightforwardly applies to many kinds of consumption activities that are, in fact, collective experiences, such as eating out in a restaurant or watching a movie in a cinema. This is also the reason why many addictions are socially determined: smoking is not only an individual activity, but also involves collective experiences, sometimes explicitly created – for example, when sharing cigarettes. Almost all elementary consumption activities are learned in a collective context. Thus, *conceptual consumption* is inextricably connected to *imitation*, mediated by *perceptual symbol systems* that are, in turn, triggered by the *mirror neuron systems* in the brain. This provides the integrity of the microeconomic process, reflected in the methodological principle of continuity.

We can talk about preferences in an even more radical sense. The values of economic goods are *affordances* – that is, subject-relative properties of objects, but not properties of subjects in isolation. The choice of a good is an action that involves subject and object in an inextricable way. In other words, the goods *become the aspects of* the preferences. The concept of affordance is the most direct counterpart to the notion of utility in the Hegelian framework. We cannot assume a set of 'preferences' which are then projected onto a 'space of goods', but the very notion of the good is intrinsically related to the notion of 'value' as utility qua affordance. It implies that, from the perspective of the individual, *it is the space of goods that reflects the preferences, and not some supposed internal state of the individual which could be accessed introspectively*. This is a *microeconomic reformulation of Hegelian expressivism*: in the course of our consumption activities, we come to know what we prefer, and the memory is embodied in the space of goods that manifest the affordances guiding our actions.

This view also makes sense in the distributed cognition perspective. The cognitive capacities we need to navigate our consumption decisions are largely externalized in the environment. For example, the location of food items in our domestic kitchens and the size of the utensils that we use for eating determine our actual food choices (Sobal and Wansink 2007). This is why 'nudging' apologists have recently recommended the active design of similar environmental aspects in the battle against obesity (Downs *et al.* 2009). We can therefore situate the approach of values as affordances in the more general theoretical framework, treating consumption as a cultural phenomenon, with valuations

situated in the world of material artefacts. Formulated in this way, it is also straightforward to treat preferences as institutions.

Then, a 'subjective value' can be conceptualized as a status function (Searle) of 'treating a certain good as value in a particular context'. As it generally holds for status functions, these are based on collective intentionality. It means, however, that the notion of a purely 'subjective' utility is wrong: if I prefer an apple, this is because 'we' prefer apples; this does not preclude individual differences in preferences, but means that even individual idiosyncrasies can only be formulated if there is a feedback loop with collective intentionality. This follows from our previous discussion of identity: preferences are institutions because the standard economic criteria, such as stability and consistency, actually mean that they define the identity of the economic agent; distinctiveness of preferences is necessary to establish criteria for identification. These criteria are rooted in collective intentionality, because if these were also idiosyncratic, identification would no longer be possible, even for the individual herself. So, if I prefer a particular kind of apple with particular colours and tastes, this is my 'subjective' preference which is unique for me, but this preference is only a stable criterion of my personal identity when it remains in the context of collective consumption patterns in a community. This has important practical implications, such as when dealing with addictions: one of the powerful means of supporting therapy is to trigger a change in the self-ascribed identities of the patient, such as recognizing themselves – in a genuinely Hegelian way – to be an addicted person (see West 2006: 161ff.).

There is another important theoretical aspect of this view that further bolsters the case for the 'preferences as institutions' approach. This is the notion of *status preferences*. The concept of a status good is inherently institutional as it reflects a certain position in a social structure, and individual preferences for a status good are acquired because they have this function. Hence, status good preferences are institutions in the strict and particular sense.

In the economic literature, status preferences have been repeatedly proposed as alternatives to the standard notion of preferences, such as in the notion of *positional goods* (Hirsch 1976; Frank 1985). This narrow definition implies that a positional good, causing a particular shape and dynamic for preferences, is not consumed for its direct effects of personal satisfaction with some of its intrinsic properties (such as a car for its convenience) but as a signal of relative status. The consequences for consumer theory are straightforward, because preferences for positional goods can never be satiated as long as competition over positions takes place (Hopkins and Kornienko 2004). This can be grasped by the notion of externalities (again, à la Akerlof and Kranton 2000): in positional competition, the consumption decisions of others directly affect my own position and hence cause a negative externality on me. 'Keeping up with the Joneses' therefore drives my own preferences independently of the subjective valuations of the goods. Again, this also holds if I refrain from 'keeping up', because this might result in explicit 'counter consumer culture' behaviour that is itself driven by the predominant patterns of consumption.

In the broader definition adopted here, *all* consumption is status consumption. This is a practice of expressing personal *identity*, and since identity, as we demonstrated above, is an externalist notion, identity and status are two sides of the same coin. Status can be understood as belonging to a certain group and occupying a certain position within this group (not necessarily conceived in purely hierarchical terms). Then, goods are seen as expressing group (that is, social) identity and the position within the group (as a reflection of personal identity, a sign of the personal narrative that established this position).[18] The notion of 'status' is thus relative to the complexity of the social environment in which the consumption takes place. Contemporary consumption patterns are certainly much more diversified than they were some 200–300 years ago and seemingly manifest the vastly expanded realms of individual freedom in pursuing the goals of consumption.

The notion of status goods implies that all consumption activities manifest externalities across individual behaviour mediated by the process of conceptual consumption. Observations of consumption by others change my own valuations. A salient empirical example could be found in the cultural industries, where valuations of cultural goods by definition cannot be anchored in individual subjective preferences (Hartley 2008). For example, we cannot reasonably assume that there are 'naturally' given individual preferences for particular kinds of music produced in the cultural industries, or for certain celebrities in the movie world. The valuations in these industries are created by the collective processes in which individuals coordinate their valuations and in which the maintenance of these collective processes is part and parcel of the valuations. This is most obvious in youth culture, where adherence to a particular style of music may define cohorts with shared identities.

In fact, 'social network markets' (Potts *et al.* 2008) are the generic forms of any market (Herrmann-Pillath 2010/2011: 76ff.). This concept grasps the fact that individual preferences emerge from the patterns of externalities generated in the social networks which frame the market processes. In the original approach, the point about cultural industries as the archetypical example for social network markets is that individual valuations there are uncertain because there is no intrinsic value for the goods. However, we can apply the same idea to *all* kinds of goods, because there is always uncertainty about intrinsic values, which results from the fact that the motivational system in our brains is never fully informed about the determinants of proper organismic functioning (see endnote 17). Again, take food consumption. We do not have direct access to information about the nutritional value which basically determines the 'liking' of certain food items (Finlayson *et al.* 2010). This is the foundation for phenotypic variation in consumption patterns, beyond genetically fixed aspects such as lactose intolerance in parts of the human population. We are not fixed in terms of our food preferences, so we acquire them through social learning: if we are adopted after birth as a Chinese, we will love chicken feet; if adopted as an Eskimo, we will be comfortable with raw fish; and as a North American, with burgers. These preferences are

independent from intrinsic valuations and can even result in the emergence of deficient food cultures, such as fast food or a misplaced focus on corn. Therefore, the expression of human preferences operates in social network markets (insofar as we are talking economics, and not sociology, thence just 'social networks') which renders all preferences status preferences in the general sense developed previously – that is, as externalized expressions of identities in the context of groups. In other words, preferences are products of a continuous social learning process driven by externalities across individual expressions of preferences.

This allows for a further conclusion in Hegelian terms. If externalities are pervasive, this implies that individual decisions about consumption will not sufficiently internalize the effects on others, and the resulting collective pattern will be necessarily inefficient (Hopkins and Kornienko 2004). For example, if I buy a new car and make my neighbour envious, leading to actions on his part that feedback even negatively on my own valuation, then my welfare could have been improved if I had considered this chain of externalities right from the beginning. This observation prepares the ground for *consumer ethics as a form of 'ethical life'*. This notion of consumer ethics goes far beyond the common concerns, such as those about consumption and the environment, or consumption and child labour. *All* consumption is ethically grounded because consumer ethics is the mechanism of internalizing the externalities in social network markets. For example, in many societies there have been ethical constraints on conspicuous consumption, thus restricting open manifestations of wealth. Clearly, these norms constrain the possibilities for others. Hence, ethical consumption involves a reflective effort with regard to the institutional nature of preferences.

Because preferences are institutions, societies evolve towards establishing norms that govern the pertinent institutional changes. Consumer ethics includes phenomena such as the recent upsurge of health concerns about consumption, resulting in a 'non-smoking' revolution in most advanced industrial societies. Another important aspect of consumer ethics refers to the refinement of tastes, i.e. the ethics of connoisseurs. Again, what is established is an ethical discipline of how preferences find expression in a collective setting, even including aspects such as the mutual recognition of 'expert' status.

In the Hegelian perspective, economic ethics is an integral part of economic theory because individual rationality is inherently normative and social. Then, there is no 'unethical' consumption and no way to ground social valuations of welfare in some pre-social set of individual preferences.

Exemplifying the normative nature of preferences is the human penchant for money. Money is a thing, and as such an object of desire. At the same time, it has systemic *macroeconomic* status, since it is constitutive of markets as systems of exchange. The institution of money is unique and foundational for modern economies and for economics as a science. It is, indeed, one of the most 'economic' of all conceivable categories in economics and, as such, is apt for illustrating the merits of the Hegelian reconsideration.

Rethinking money in the Hegelian perspective

Money can be duly regarded as one of the key market institutions, and its theoretical significance is comparable, for instance, to that of property rights. We will demonstrate below how the Hegelian triad of continuity, performativity and recognition can be applied to the analysis of money as an institution, and how the conceptual tools developed in Chapter 2, and the Aoki model in particular, can be applied with insight. First, we argue that money is unique in being a culturally constructed primary reinforcer and as such is an important example of the 'second nature' (in the original psychological theory of operant conditioning, primary reinforcers are natural and unconditioned rewards that do not need to be learned, such as food and sex). Along the lines of the continuity principle, this requires taking a look at the results of recent behavioural economics and neurosciences, and discussing the phenomenon of money in the light of these developments. Second, the institution of money is performative, both in the narrow sense (money is decreed as money) and also because it is socially creative, enabling social actions which are impossible without money, thus also feeding back to the reproduction of the institution. Finally, we analyse the role of recognition in creating and sustaining the money institution, which is implicit in recent philosophical approaches to money, in particular those of Searle and Tuomela, which highlight the role of collective intentionality. We summarize our results in applying the revised Aoki model to money.

Our analysis of money is naturalistic in conjoining neuroscience and behavioural economics results with the idea that money is an 'observer-relative fact' (Searle 1995). This understanding is a case in point for Hegelian 'naturalistic idealism'. Money does not exist in nature, and there are no natural forces that establish its existence. But although money is an idea, it is one of the constitutive elements in establishing economic reality and the social ontology of markets, insofar as it is real – or, as some Marxists would say, it is a *real abstraction*. We will show that the Hegelian interpretation of money is opposed to the monetary theories that until most recently shaped many important strands of economic thinking claiming that 'money is a veil'.

The continuity of money

One of the interesting facts about modern psychology and neuroscience is that researchers can use money as a strong incentive, thus making experiments much easier to implement than if other incentives were used. The leading scholars dealing with the reward mechanisms of the human brain opted to use money in their research on delayed rewards and the expectations that underlie the reward prediction error hypothesis in analysing the role of human dopamine circuits in determining human choice (Knutson and Peterson 2005; Knutson and Wimmer 2007: 159f.; Glimcher 2009: see above our discussion of the Glimcher model). Money elicits responses similar to those elicited by other pleasures in the reward centres of the brain, which work as primary reinforcers (Camerer *et al.*

2005: 35; Phelps 2009: 240). Thus, although formally money could only represent a secondary reinforcer, as it plays a merely instrumental role in gaining other benefits, in its actual performances in the context of neuroscience it operates as a unique type of primary reinforcer, because it is a purely cultural construct, while triggering neurophysiological effects like other primary reinforcers such as delicious food. In spite of these strong effects, we cannot imagine that within biologically relevant time periods, a 'natural' penchant for money may have evolved in the human species. The strong incentive effects of money even emerge in contexts where societies previously not exposed to money rapidly become involved in money-mediated market exchange (Lea and Webley 2006: 162). So, we cannot legitimately conjecture that there is a direct biological mechanism which creates the desire for money – it is, rather, an element of the 'second nature' (so, we provide a Hegelian response to Glimcher's 2011: 423f. question of where and how the preference for monetary rewards is anchored in the neuronal structure).

If experimenters use money as an incentive, they implicitly assume that money is a reward that works upon individuals in a similar fashion through time and across individuals. In contrast, if we look at money through the economist's magnifying glass, what we see is merely a means of transacting that does not produce any utility on its own – that is, money should not even play a role as a secondary reinforcer, let alone as a primary reinforcer. This is the neoclassical equilibrium view on 'money as a veil'. In an intermediate position, the utility of money is only derived from the fact that people can buy goods and services by using money as a transaction device: in this case, the utility of money can only be derived from using it as an interim storage for purchasing power, to reflect the value of a standardized basket of goods (Harrison 2008: 306f.). Another possible source of money utility stems from reducing transaction costs. However, this would not imply any strong and stable role for money in generating utility. In particular, the perceived reward when being given money would be contingent upon current states of individuals in terms of what they would imagine being able to buy with that money at the particular moment when the experiment is conducted. This cannot explain the practice of psychologists in using money as a substitute for other primary reinforcers.[19]

Thus, experimental evidence suggests that money comes close to being a primary reinforcer, in spite of the fact that 'you cannot eat it'. The key psychological and neuroscience support for this hypothesis is the phenomenon of the *money illusion*. For decades, money illusion was an ad hoc assumption used in macroeconomics to explain certain phenomena such as the Phillips curve, but in the 'rational expectations' revolution of the 1970s this idea – which clearly referred to empirical facts, though without theory – fell out of favour on mere axiomatic grounds. The money illusion directly reflects the 'surplus' of valuing the possession of money beyond its mere technological uses of enabling transactions and postponing consumption. Akerlof and Shiller (2009: 41ff.) include the money illusion in their list of 'animal spirits' which drive what they perceive as the irrationalities of markets. Today, there is

clear-cut experimental and neuroscientific evidence on money illusion. In a now classical paper, Shafir *et al.* (1997) present experiments in which subjects consistently confuse nominal and real values, in spite of the fact that they are basically aware of this distinction; these results have been recently supported by neuroscientific research.[20]

This bird's eye overview on recent experimental and neuroscientific evidence on money shows that, contrary to standard economic wisdom, money is an object that is desirable in itself, producing 'utility' in the sense of direct rewards, which are independent from its role as an intermediator in obtaining other goods. However, we still need to recognize that money is a purely cultural construct, an element of institutional reality. This double face of money is also reflected in its history, especially with regard to moral concerns about the human aspiration to 'get rich'. Generally, there is much evidence on strong emotional responses to money beyond the reported direct experimental research, including popular perceptions of money throughout history.[21] This strong emotional index is also reflected in the forms of social change related to the emergence and diffusion of money. The rise of the modern economy, in which money appears to be a mere 'transaction device', was always accompanied by a process of 'domesticating' the emotional aspects of money use, especially with regard to the role of greed, which might overcome even the fear of the devil, as in hundreds of European fairy tales.[22]

One further aspect of this rationalization process concerns the relationship between gambling and the financial professions, which still exists today. In times of crisis, notions such as greed and pleasure from taking irresponsible risks loom large. This alteration between different interpretations of the drive for money was especially salient between the eighteenth and the nineteenth centuries. In the eighteenth century financial investors were mostly seen as figures operating in a morally illegitimate domain (Preda 2005). The incipient financial markets were seen as gambling dens, and indeed, financial trading was a business conducted in these premises. There was no idea that this activity might contribute to the wealth of society along Smithian lines, being mainly based on fraud, deceit and greed – sins committed in a state of drunkenness, both metaphorically and literally, hence representing a deviation from the social order. Only in the nineteenth century did the figure of the *rational* investor emerge, seen as a person who is familiar from the standard accounts of economists: sober, data-driven and always striving towards the optimal states. This was accompanied by the emergence of a whole quasi-scientific infrastructure that laid the foundation for the practices in modern financial markets, such as specialist journals, technological devices, and the necessary education to utilize all of this.

Max Weber did not perceive financial markets stay at the core of his analysis of modern capitalism; yet, it is still important to note that in Weber's theory of rationalization the ideal of moral constraints on emotions plays a significant role. Weber's Calvinist entrepreneur is a person who manages to domesticate the insatiable drive for accumulation and channel this into productive investment by

means of 'inner-worldly ascetism'. However, the association between gambling and financial (or 'casino') capitalism is widespread even today.[23] In the media and in the public perception a strong link persists between the morally suspect activity of 'speculation' and financial markets, in particular. We believe that this cannot be explained simply by the alleged continuing state of ignorance on the part of the public. The alternative explanation is that this association goes back to the fact that money comes close to the role of the primary reinforcer. Handling of money cannot be simply reduced to the handling of coffee beans: if I handle coffee beans in huge quantities, I cannot possibly reach direct satisfaction from consuming these; if I own money, there are no physical limitations to the amounts of money that I enjoy controlling. This 'infinity' of the desire for money can explain the fact that throughout history, money has been judged on moral grounds, in the sense of the need to establish clear institutional boundaries for the uses of money in morally neutral fields, which, however, can only be understood in relation to other fields where money might be seen as conflicting with moral norms (for a comprehensive analytical survey, see Walsh and Lynch 2008). This is why 'commercialization' has always been a contentious question with regard to drugs or sexuality.

As we see, there is plenty of evidence regarding strong emotional anchors for the use of money in human societies. Therefore, we can ask whether and how money institutions are grounded in these emotions.

We can start from the observation that the use of a cultural artefact in governing social exchange relationships is a unique feature of the human species.[24] This presents an intriguing difficulty. On the one hand, we can certainly say that money arouses emotional responses by being a powerful incentive, which should also involve the triggering of certain biological mechanisms. On the other hand, we cannot reasonably assume a sort of 'money instinct' as a part of the human biological legacy.

So, we follow the continuity perspective: *money involves biological motives as its intrinsic moment, but also transcends them as an institution.*[25] There are good reasons to assume that during human phylogeny a special neuronal mechanism has evolved that supports social exchange and the related capacities to evaluate exchange opportunities and balances in realized transactions. This case has been made especially strongly by evolutionary psychologists (for a survey, see Cosmides and Tooby 2005). They argue that humans developed a cognitive instinct for reciprocal exchange. The theory of cognitive instincts follows the logic of neurocognitive analysis of vision (Marr 1982): a certain set of functions of potential brain mechanisms relative to a selective environment is studied in order to test alternative hypotheses on possible mechanisms that are apt to fulfil these functions. This can be done by further neuroscientific scrutiny of brain structures. A cognitive instinct might refer to many different possible realizations, such as a particular brain area, or a pattern of systematic interaction across brain areas. There is no need to assume a special neuronal pattern responsible for money use, as long as we can formulate systematic hypotheses about related brain functions.

The hypothesis of a cognitive instinct for social exchange can be deduced from analysing the general selective pressures on human adaptation in group life. This is not the place to analyse these in detail, so suffice it to state the well known fact that human adaptation rests upon cooperation in groups, such as in group hunting or collective defence against threats. In terms of recent game-theoretic reasoning, these patterns of cooperation create strong incentives for free-riding, cheating and other forms of collision between individual interests and the production of public goods. Therefore, we can assume that human evolution fostered mechanisms to contain cheating in these contexts and to maintain reciprocity. It is important to note this, as it does not relate to some primordial scenario of pure barter as emphasized in standard economic theories dealing with the origin of money.[26]

A more plausible scenario would suggest that for the human instinct of social exchange, a particular combination of exchange and special capabilities to detect cheating (i.e. violating reciprocity) would be functional. This hypothesis is opposed to the generic economic approach to rationality which implies that situations which involve social exchange are always analysed in terms of a general model of rationality defined by economic theory. This opposition between an adaptive model of the instinct of social exchange and the generic model of rationality applies for both the standard and the behavioural economic model. Both models are generic in the sense that humans are seen as being endowed with a generic cognitive mechanism of choice that is actualized in different contexts: only the assumptions about the properties of this generic mechanism differ (for example, prospect theory is a generic theory in the same way as standard maximization models). On the contrary, the evolutionary psychology approach assumes that humans deploy context-specific cognitive mechanisms, and one context is social exchange. That would suggest, for example, that human cognitive capacities differ across different domains of action.[27]

So, we can regard the hypothesis that humans manifest a cognitive instinct for social exchange as being well-supported. Money activates this cognitive instinct independently of whether social exchange is actually involved. Then, individuals receive autonomous rewards from holding money in spite of the fact that the mere possession of money does not amount to social exchange activities. The artefact of money triggers a 'somatic marker' (Damasio 1995; Bechara and Damasio 2005) that mediates the human cognitive instinct for social exchange.

There is important evidence in favour of this view which is of considerable theoretical interest for economics. It concerns the historical emergence of money. The mainstream explanations of the emergence of money mostly go back to Menger's (1892) theory of barter. Menger argued that in a barter economy, individuals will necessarily aim at obtaining goods with a high degree of saleability in order to increase their chances to receive the final goods they aspire to, but which are currently not available. If everybody aims at obtaining goods with a higher degree of saleability, there will be a tendency by everybody to assign a high value to those goods, which further increases demand for them.

Saleability is determined by physical and social characteristics in spatial, temporal and functional respects.

There are several problems with Menger's approach, mainly concerning the transition between the mere use of commodities in mediating barter and the emergence of one single species as 'money' which fulfils all of the functions identified by economic theory. Menger makes recourse to habit and other social-cognitive determinants in order to explain this transition. Further, there is the difficulty that people should be able to hold surplus stocks of goods that they cannot immediately use for the fulfilment of their needs, which seems to contradict realistic assumptions about early barter in subsistence economies. Finally, during the entire process of gradually increasing saleability no substantial changes in those relative degrees of saleability of different goods should happen, because otherwise the process could collapse or get stuck in intermediary states without the emergence of money. In fact, one could argue that such a state of fragmentation is the typical state of so-called 'primitive money'.

However, the main challenge to Menger's and related economic theories comes from the historical evidence that associates money with *social reciprocity* in the networks of mutual obligations, especially in a hierarchical context. Menger already assumes 'market type' barter relations in which people are able to hold assets only for the purpose of barter – that is, to enjoy considerable surplus production. This was not the case for social exchange in primitive economies that were organized as a network of mutual obligations, such as in the so-called gift exchange (Graeber 2011: 21ff.). People give goods away for which they have no immediate urgent need and thereby create an obligation to return a favour of unspecified kind in the future. In this case, immediate closure of exchange chains or triangles is not necessary because instead of using money, people incur debts. In other words, mutual trust in social exchange is the functional equivalent to money in primitive barter, and the need for money does not emerge as envisaged by Menger. This implies that it is not the problem of synchronizing multilateral barter which is solved by money, but the expansion of the scope of credit and mutual debt. In fact, traditional relationships of reciprocity already involve all of the complex functions that are associated with money, especially the calculation of value and the transfer of value through time (Burkert 1996: 132). The Menger-type problem of barter only emerges in a setting where the division of labour is already so complex that trust in mutual obligations does not hold. But this amounts to assuming modern markets in the disguise of barter. In other words, in this view money is a functional equivalent to trust in primordial barter relations, but it cannot be seen as emerging from these relations, if only for the simple reason that it was not necessary. The standard economic functions of money are not rooted in barter, but in the webs of social reciprocity which grow in size and scope, thus eroding traditional sources of mutual trust.

As Chavas and Bromley (2008) highlighted, early money mainly emerged in hierarchical relationships involving the production of public goods in the sense of creating and maintaining large-scale political and religious units, such as the Babylonian empires. It emerged as an accounting standard for calculating taxes

and other obligations, and also served to fulfil these obligations. Money initially appeared in the context of debt relationships, and only later became a means of transacting. This also implies that money was deeply embedded in cultural contexts of social structure, such that its use in cross-cultural encounters of trading relationships presupposed certain interpretive transformations.[28]

The historical evidence supports the hypothesis by Chavas and Bromley that money does not only have positive effects upon the efficiency of transactions, but also and primarily upon production, especially in the context of public goods. Therefore, the use of money in the context of collective activities predated the diffusion of money in trade transactions. This means, in turn, that the original function of money is not the enabling of transactions, but rather the accounting function, related to the enforcement and evaluation of debt relationships and obligations (compare Ingham 2000). This adds another difference to the economic account of money, as the use of money is not related specifically to the idea of voluntary exchange. On the contrary, the primordial uses of money may have been mainly related to hierarchical subordination, where forced monetary exchange served as a device to coordinate collective action.

We can generalize this by observing that money, also in later times, is used both in the market and as a medium of taxation, at least in the accounting sense. This observation helps us to understand why political power has always proven to be necessary for establishing trust in money: money is normally used to repay the debt to the government. Then, as long as the government accepts money as a tax payment, basic confidence in money can be guaranteed. This role of extra-economic forces in determining the acceptance of money roots it in the religious dimension of social reciprocity in pre-modern societies, especially with regard to the exchange between believers and religious entities, such as in offerings to the Gods, and in the valuations when assessing punishments for deviant social action.

In sum, recent neuroeconomic and experimental research on money converges with historical accounts of the emergence of money institutions in demonstrating the continuity of money. Money is a unique economic institution in being a *cultural primary reinforcer*. This notion may appear to be an oxymoron, since culture is normally seen as a repository of indirect learned mechanisms in shaping behaviour and thus seems to stay in tension with 'nature'. However, in the case of money we meet an important example of a cultural construct that has emerged as a genuine case of the 'second nature' of human life (again, this is implicit to Glimcher's (2011: 423f.) brief neuroeconomic characterization of money). This means that the money emotions studied by neuroscientists are institutional phenomena in their own right and present a legitimate object of inquiry as the moments of objective spirit presented initially, in the abstract form, as the features of subjective spirit. The dialectical movement from the subjective to the objective spirit would correspond to the logic of research deriving regularities on the institutional level from the microphenomena of choice, greed and satisfaction, but then interpreting these phenomena in the institutional sense, as shaped by and depending upon the social and historical milieu.

The performativity of money

Dealing with the continuity of money we drew on, among others, Max Weber and his analysis of rationalization that encompassed the study of emotional drives and attitudes together with the account of evolving cultural forms. But money as an institution is also performative. To show this, we will turn to another great German social thinker, Georg Simmel, and his monumental *Philosophy of Money* (1900/1907); however, this book does not play any role in modern economics, as it is mostly seen as a contribution to sociology. In this work, Simmel developed an analysis that is congenial to our Hegelian framework as established so far.[29]

Simmel's contribution has to be seen against the background of the economic debates in the wake of the twentieth century, in particular the move towards neoclassical views in which the institution of money is merely seen as a transactional device, culminating in the neoclassical notion of 'money as a veil'. Although Simmel explicitly noted that his analysis is not an economic one, our perspective certainly reinstates the relevance of his ideas for economics. Simmel regards money as an external artefact with autonomous causal powers manifest in the vast range of behavioural and social changes resulting from its emergence, which we have already scrutinized above. The analysis of money involves the dialectical synthesis of synchronic and diachronic dimensions in studying those causal processes: synchronically, money appears as the standard of value which is present in the common distinction between relative values and absolute prices in economics; diachronically, money plays a major role in coordinating economic actions through time, which implies that *absolute, nominal prices* governing realized transactions obtain causal forces in determining the direction of the economic process (contrary to the exclusive emphasis on relative prices reflecting relative scarcities in the standard approach).[30] This view points towards recent developments in economic sociology which also treat 'prices' as social facts, in the sense of being embodied like money (Çalışkan 2007).[31]

One aspect of the performativity of money is also present in economics, but is mostly detailed in recent approaches to the 'philosophy of sociality' (Tuomela 2007). Money can only fulfil its economic functions when it is recognized by everybody. Thus, it depends on a sort of *collective declaration* to use a certain species 'as money'. Once this declaration is made, money comes into existence, like the game of chess with the declaration of its rules. It is thus performed in a narrow sense.

However, in Simmel's work the performativity of money is much more encompassing, because money has comprehensive transformative powers which are effective in all social interactions. There is a vast range of social phenomena which are conditioned by the existence of money. Simmel argues, for example, that the modern state is particularly dependent upon the existence of money as monetary payments: taxation and the employment of salaried administrators enable the construction of bureaucracies independent from other forms of loyalties and commitments, such as in feudalism. This transformation, in turn, generates further demands for the services of money, thus, for example, enabling the

emergence of government debt instruments in war finance which laid the foundations for modern financial markets and banking. These causal feedback circuits manifest the performativity of money in the broader sense. The emergence of fiat money constitutes the monetary culture, the declaration proves truthful by asserting itself in the world of objective spirit – that is, in the institutional reality. Once the institutional fact of money comes into existence, other institutional facts can be created, thus expanding and reinforcing the 'second nature' engendered by money.[32]

Standard economic approaches focus on the functions of money as a unit of accounting, a store of value and a medium of exchange. They stop at the point where the performative powers of money would have to be explored. In Simmel's time, Menger had already published his highly influential work (discussed in the previous section) dealing with the emergence of money. In his account, money evolves spontaneously because certain media of exchange adopt monetary functions in a pre-existing exchange economy. Simmel's thinking differs radically from this view, for he regards money as the defining feature of a fully-fledged exchange economy, to be distinguished from mere barter relations: money drives the emergence and unfolding of market exchange, and not the other way around (Papilloud 2003b). This is because only money allows for intersubjectively valid valuations such that both sides of a transaction perceive gains from trade.

This view relies on the fact that money is an externalized artefact that does not simply represent a non-monetary value. In Simmel's view, the economic distinction between subjective value and price implodes once the performative role of money is made explicit. Only money gives rise to cognitive skills and operations that allow for measurement and definition of value in a way that enables the expansion of exchange transactions. These cognitive capacities are straightforward to identify. In particular, this refers to the emergence of discrete measurements, and thereby arithmetic operations along with the comparison of values across different subjects and objects of valuation. These cognitive operations differ in principle from the merely subjective assignment of value.[33]

Simmel scrutinizes the process by which subject and object are differentiated from one another such that the object becomes an autonomous phenomenon to which value can be assigned. He argues that 'value' emerges from the necessity to expend effort achieving a certain good. Effort means that there is a cost in terms of giving up something to gain another thing. This is the 'exchange' that underlies subjective ascriptions of value. However, Simmel argues that this value is not yet 'economic' as it is not sufficiently 'objective' with reference to the subject. The objectivity of value rests on exchange among different subjects, such that the mutual recognition of the value of goods is embodied in a value judgment that is external to both of them. Value does not appear to be a property of objects, being assigned to objects by epistemic activities of subjects. Wittgenstein's basic logic teaches us that these subjective assignments can only be stable in terms of 'meanings' if they are recognized in communities of language users. In Simmel's context only the externalization of value judgments in the

intersubjective exchange relations can turn value into a stable, meaningful and individually functional category. So, exchange is triggered by initial subjective valuations, but those value judgments only become objective and stable in the monetary exchange. In this sense *monetary exchange is a phenomenon of externalized and distributed cognition.*

The apparent fragmentation of human valuations represents the necessary state of *alienation* that occurs when subjective valuations need to be projected into objective values and prices, in order to establish value as an intersubjective category. For Simmel, values are parts of a social ontology which transcend the differentiation of subject and object. Once money exists, value judgments become universal and objective, which is, in turn, based on the nature of money as the embodiment and crystallization of exchange in the abstract sense. In other words, the artefact of money is the physical substantiation of exchange. The possession of money entails universal scope for opportunities for exchange.

Thus, money not only establishes value relationships that transcend subjective valuations, but also constitutes value in embodying future exchange opportunities. Money also transforms all social relationships by making the individual independent from any particular social group, at least in principle. This also allows for individual freedom in the sense of developing independent individual identities by drawing on societal repositories of symbols and lifestyles. Money culture, as described by Simmel, is a culture of abstraction. The ideas of abstracting from concrete properties of heterogeneous things, effectively making them commensurable and giving the world a calculable shape, became embodied in money, exerted an impact upon other values, and became a part of the broader institutional landscape. This manifests the performative dimension of money. Monetary culture enacts itself.[34]

This view further supports our new interpretation of subjective preferences in economics, which we developed in the previous section. Subjective preferences are not the causes of actions, because actions are determined by objective values established in social interactions and embodied in money.[35]

Interestingly, Simmel was fully aware of the fact that the significance of absolute monetary prices presupposes a stability in the valuation of money proper. Simmel had an original theory about the economic function of the money illusion (without using that modern term) acting as a stabilizer. In the Simmelian perspective, the money illusion is a central element in creating the social ontology of money. Providing money with an additional force of commitment also explains why governments, as institutions with a special authority in modern societies, play an important role in safeguarding the functions of money, in spite of frequent abuses. So, whereas in modern economic theory the money illusion is taken to be a failure of rationality, in Simmel's view it is a key condition for establishing the causal powers of money in the economic process. The money illusion acknowledges the fact that money is value and that absolute prices matter causally. The 'irrationality' of this assumption can only follow from the 'synchronic' view on money – that is, the quantity theory approach in the broadest sense.

This observation is particularly important for the role of money in driving ever-increasing chains of transactions, which Simmel calls 'teleological chains of purposes'. Basically, the acceptance of money in exchange is a form of abstract *credit*, especially in the moment when money no longer has an autonomous value, as in the case of metallism. This view could also reach out to the recent debates over money and macroeconomics, triggered especially after the financial crisis of 2008. In a Simmelian perspective, it is impossible to separate the 'real' and the 'financial' sphere of the economy because money is basically a form of credit and is created by credit. Credit drives the real economy by enabling investment. Therefore, thinking in terms of any direct relationship between a 'quantity of money' and the general level of prices, which leaves relative prices unaffected, is misleading in capturing entrepreneurial decisions to advance money in order to produce goods to be sold later in the marketplace, and to set absolute prices which then drive real transactions (compare Binswanger 2013). Both express the creative function of entrepreneurship which is mediated by money.

The most elementary form of credit is the credit the entrepreneur gives to herself when putting confidence in her own business idea. In a complex division of labour, all economic actions – and entrepreneurial investments in particular – require advancing payments for inputs in order to produce saleable output. If the entrepreneur uses her own money to start a business, this is a form of credit invested in this business idea. Money is strongly associated with the ontological uncertainty of future courses of action, a fact that has always been emphasized in certain strands of Keynesian thought, but also in Austrian economics (cf. Laidler and Rowe 1980).[36]

In our context, these brief remarks on money and finance mainly aim to illustrate the significance of the Simmelian approach to money for economics in the narrow sense. The causal powers of money rest on the fact that it is value in the context of actions through time. This role of money comes to the fore when analysing the institution of credit and the way it works in the macroeconomy. From these considerations, we can draw the conclusion that, even in this context, money is performative. It is credit, both in the sense of giving credit to the user of money, and in the sense of trusting in money. This implies that in the modern phenomenon of credit, the macroeconomic structures turn performative, too. This is often referred to as 'animal spirits', thus suggesting a high degree of irrationality. However, this is misleading, as there is no anchor for the supposed alternative 'rational' state of the economy. The performativity of the states of the economy is itself an expression of the Hegelian rationality of collective coordination of expectations and markets, mediated by money (for more detail, see Herrmann-Pillath 2013a: Chapter 8).

Let us summarize the features of Simmel's theory of money that move closer to the perspective on the theory of institutions developed so far:

- money mediates the separation of subjective and objective valuations as an externalized artefact;

- its existence transforms subjective valuations into individually objective valuations, thus enabling rational choices;
- this role of money evolves institutionally, thereby transforming individual agency in the context of new social formations and culture;
- money entails a new conceptualization of social reality as the dynamic embodiment of abstract relationality.

Recognition and the social ontology of money

The emergence and the persistence of money as an institution rest upon the collective agreement to use a certain artefact 'as money'. Thus, money could be called a *constitutive* institution, as compared to merely regulatory institutions: monetary institutions create money as a new social fact, and do not merely regulate existing forms of social interaction (Searle 1995: 27). Money does not exist independently from the rules that people agree upon in order to establish its uses.

If we follow the logic developed so far, we have to assume that in order to become an institution, money should become a moment of the human practices; furthermore, it should be dynamically embodied, or performed, in such a way that its very declaration, the manifestation of the idea, establishes real self-sustaining and self-enforcing structures. But the last important element is lacking here – the intersubjective acceptance, or *recognition* of money as designating a specifically social mechanism of its institutionalization. It is quite clear in general, but we need to elaborate upon particular phenomena of this social acceptance, link them to the previous elements of this theoretical picture and integrate these insights into one framework.

If money emerged from an evolutionary process of barter (as suggested by Menger), it would just be a regulatory institution, at least in the case of commodity money: that actually amounts to stating, in some form, the money neutrality. So, the question is whether, over the course of history, there was a transition from a regulatory to a constitutive institution, connected to the creation of fiat money, or whether the Menger process already includes this transition.

An immediate application of Searle's status function approach would yield statements such as, for example, 'Electrum coins *count as* money *in the context* of Lydian trade between Ionia and Assyria around 650 BCE'. Seemingly simple, this reconstruction involves complex cognitive processes, both internal and distributed. The transition between pluralist uses of commodity money in the Menger scenario and the final establishment of one single currency 'as money' should draw on these processes. But what is the meaning of this transition? Does this already imply the constitutive nature of the money institution? The first answer to this question leads back to the continuity aspect.

It is well established in other applications of neuroeconomics, such as the analysis of brands, that many neuronal processes have a 'winner takes all' feature, meaning that, for example, within a particular domain of goods only one brand achieves the status of the single most preferred brand. This involves distinct patterns of brain activation, including emotional circuits as well as the

centres where rational calculations take place (McClure *et al.* 2004; Plassmann *et al.* 2007). Similarly, we can conjecture that in terms of the emergence of money, only one currency will obtain the status of being 'the money' for a particular individual, which would establish the connection between money tokens and somatic markers of social reciprocity.

We can interpret the causal connection between the artefact and the somatic marker as a 'background' phenomenon in the sense of Searle. The background is a set of non-intentional enabling factors, such as neuronal structures, that create a disposition to act and serve as a basis for status functions. In establishing this connection, a disposition to use a certain type of object as money is created. This disposition underlies the puzzling stability of the generic money institution in spite of recurrent situations of crisis, inflation and the collapse of single currencies. That is why there is a rupture in Menger's transition to 'money' from a state of different local media of exchange. There is only one 'money' that manifests the specific function of activating somatic markers related to social reciprocity. Thus, we can also say that the existence of these somatic markers provides the conditions for the emergence of money as an institution. This is another ramification of the continuity thesis: the human cognitive instinct for social reciprocity discussed above creates a disposition to establish money.

This observation leads us to evaluate the role of artefacts in extending the cognitive functions that enable social reciprocity. Artefacts that allow the externalization and enhancement of these capacities will be easily adopted in social interactions. This is why Menger's analysis of the emergence of money is misleading, whereas Ingham's (2000) conjecture, which emphasizes the accounting function of money, is more plausible. Money most probably emerged in the circles of social exchange (gift giving, reciprocal obligations and so forth) as a medium for a more efficient calculation of the flows of reciprocity and for value transfer in social exchange. These considerations should be traced back to their Hegelian (and then, Marxian and Simmelian) origins. The dialectical logic behind these processes implies that money is the reification of social relations and values. Once values in reciprocity are mapped into material objects, they achieve the status of a social fact and a real working abstraction, giving birth to the new extensions of reciprocity beyond the confines of the primordial communities of exchange.

The next question is how far we can identify the mechanisms of collective intentionality in the emergence of the money institution. The Menger process takes place in the 'I-mode' (in Tuomela's 2007 terminology), or individual intentionality, meaning that different individuals decide, each on herself, to collectively use money. The question is how far the decision to use money corresponds, say, to the coordinated decision to use cars in society, with traffic being the pertinent collective phenomenon, or whether the comparable phenomenon would be the decision to play soccer and to win the game as a team, which cannot be reasonably made in the 'I-mode' because it is only 'we' who can score as a team by means of collective action (Sugden 2000).[37]

However, if we consider the original step towards the introduction of money, the 'I-mode' approach seems to fail because the process can only be triggered by the unilateral decision to accept a currency that another individual also creates at the same time. In the framework of Menger's voluntary exchange model, no individual can directly enforce the use of money on others. So, the only way to start the process is to give goods away against money one initially launches. In the individualistic framework this action is altruistic (in the sense of Field 2001) because others may always be happy to cheat the innovator, i.e. taking the goods by paying with the money, but requesting goods for their own offers. This leads to a more basic problem for the initiator, given these perceived incentives: to make others *recognize* her announcement, or, in the language of contemporary economics, make it credible.

In a Menger setting there are two plausible alternatives for explaining the emergence of money: one is altruistic action, and the other is enforcement by a powerful agent who can overcome the commitment problems in containing cheating over the money institution. Both alternatives go beyond the original model of rational choice and voluntary barter. The second alternative seems to come closer to the historical facts, as we have seen, with money originating in hierarchical systems of public goods production. Yet, even these approaches cannot fully explain the emergence of *trust*. This is the general problem of establishing mutually compatible expectations – that is, removing the otherwise infinite regress of expectations over expectations (Searle 1995: 23ff.) and establishing trust in groups of interacting agents. Trust cannot be reasonably explained by purely individualistic interactions, but only as a result of group-specific shared attitudes, i.e. the 'we-mode' (compare Hollis 1998; Field 2001; Nooteboom 2002).

This discussion shows that explanations of money that remain in the 'I-mode' logic lead to self-contradictions because the first step can only be explained by means of actions that violate the conditions of the model. This conclusion applies for all standard economic explanations that remain in the framework of methodological individualism. Therefore, we assume the 'we-mode' as the point of departure. This is what is also required in the second step: the mere fact of being incentivized by the action taken unilaterally means that all actors in the original barter economy already share some idea about 'money' and its uses in society. This is a process of *recognition*: Ego can only launch money as a social institution if Alter also recognizes Ego's use of money, and vice versa.

This transition has been analysed in great detail by Tuomela (2007: Chapter 8), using money as one example of social institutions in general. A central idea of his account seems to be that there is reflexive collective acceptance of the institution: for example, the group collectively asserts that this species is used as 'money' within the group, and everybody knows that everybody knows this (common knowledge). This is the way money gets recognized. With regard to the Menger account, the central question in the emergence of money is not how money enhances the technology of trade, but how mutual acceptance can be created in culturally meaningful actions (see endnote 27 for an example).

We will now summarize our analysis of money as an institution with the Aoki model as a frame of reference (Figure 3.4). This also allows us to provide interconnections for the various relevant theoretical resources we have mobilized so far.

The revised Aoki model deals with the artefacts that embody the information-compressing functions of institutions. In this context, money can be treated as a sign. This comparison – previously well-known under the heading 'money as language' – captures the fact that money enables a specific sort of symbolic communication, such as in realizing payments or in using monetary measures for accounting purposes. Most generally, money enables a range of cognitive processes and thus substantially enhances individual cognition.

Money can also be regarded as a special case of *distributed cognition*: money tokens trigger dispositions to use money. Such a disposition turns into a behavioural bias towards using money within a particular community of users; this bias is reflected in the phenomenon of the money illusion. Therefore, on the level of interactions between users of money, a channelling effect occurs, enforced by different mechanisms such as the salience of a particular money token in exchange relations. In a community of money users, the actual coordination between individual causal connectivities among money tokens and somatic markers provides the basis for collective intentionality in using money emerging from interactions. On this level, other factors come into play which can also be grasped in the 'I-mode' logic of analysing population-level phenomena of stra-

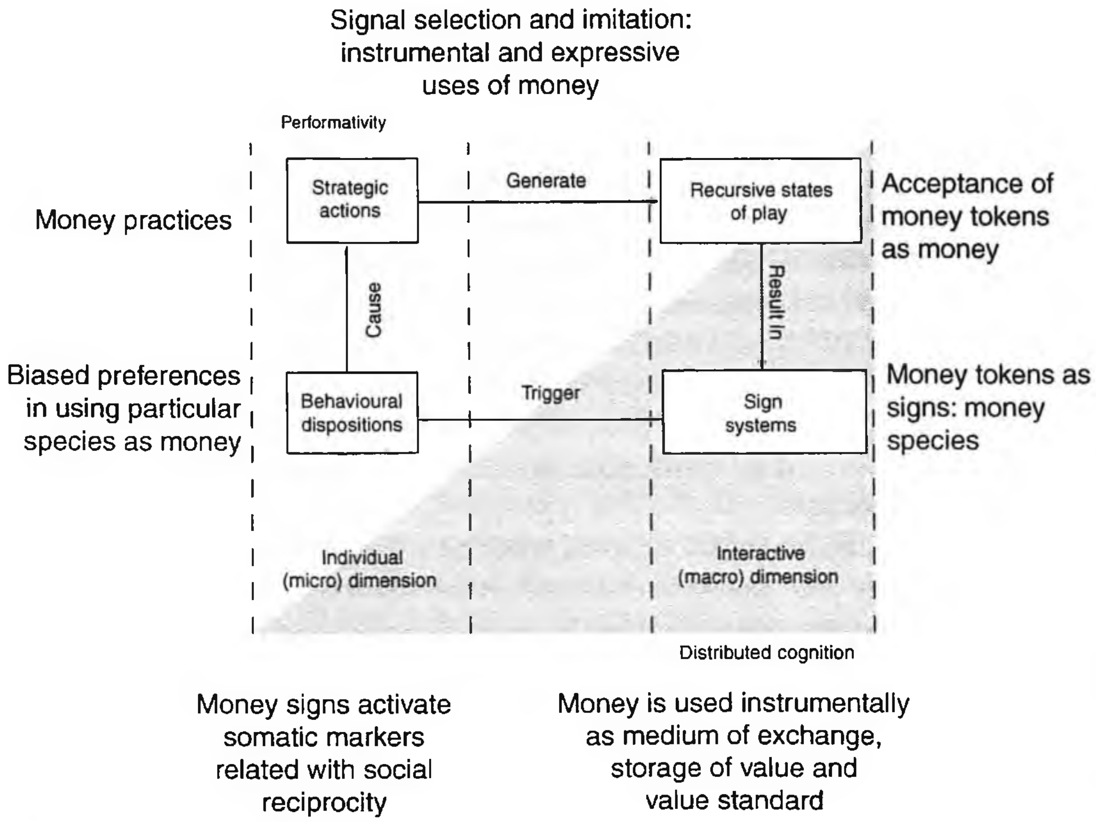

Figure 3.4 The institution of money in the revised Aoki model.

tegic interaction, such as the network externalities in the diffusion of money as a medium of communication.

As a result of these interactions, the use of money is established within a particular community of money users. This closes the causal circuitry of this institutional structure. In fact, all the 'rule-based' aspects of money are rooted in physical manipulations of money tokens. For example, in measuring values I actually compare an object with a heap of coins, and I treat value as a category upon which I can apply arithmetic operations, simply like shuffling around coins. Storing value can be traced back to putting coins into a vault. Therefore, the standard account of monetary functions is actually based on these physical operations and appears to be a mere abstraction from these. In this sense, it is not money as an artefact that fulfils these functions, but the fact that the artefact enables people to fulfil these functions by means of actions involving money tokens, whether hard metallic stuff, paper slips or glimmerings on a screen. This is why the physical form of money does not matter in the end (which differs from the critical role of physical form in technology, such as the form of the knife that matters for the function of the knife).

As is further detailed in Figure 3.5, the stability of the money institution rests upon a causal loop that moves from primordial determinants to secondary ones, pictured in the concentric layers of causalities. The primordial determinant – the 'brute fact' (Searle 1995: 55f.) – is the causal conjunction between money tokens and the somatic markers of social reciprocity. This brute fact is reflected in the

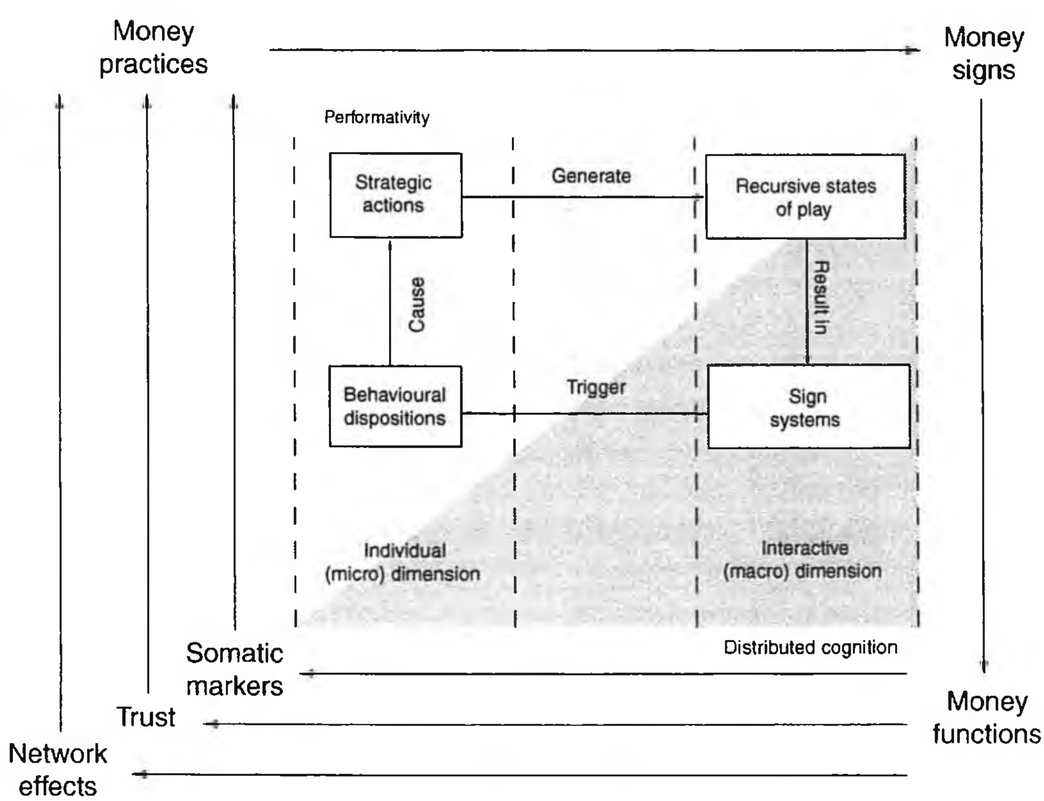

Figure 3.5 The stability of money as an institution.

symbolism of money tokens that emerged in the earliest time of minting (such as the use of religious symbols on coins) and continues to exist, for example, in pictures of eminent personalities on currency notes. It is manifested in the money illusion, which is, in turn, an expression of trust in money.

Trust is an essential condition for the diffusion of money. One of the most important factors underlying this trust is the *association between money and political power*. For one, political power can simply enforce the use of a particular species in its jurisdiction. However, there is also the deeper connection between money and individual contributions to collective good production, independent from the question of whether power also enforces certain conceptions of that collective good. This is an extension of the general idea of social reciprocity within hierarchical relationships, such as gift giving between leaders and subordinates. Trust in money, as indicated above, relies on the fact that a certain object is used in calculating and fulfilling the obligations of the community members towards its body politic. The fact that the sovereign accepts money as a form of meeting the individual obligations to the community is a leading factor in creating and maintaining trust in money. Therefore, the primordial determinants of trust that rest upon the 'winner takes all' effects of somatic markers are bolstered by institutional determinants of trust, backed by the powers of the sovereign.

Finally, the use of money is driven by the technological externalities that emerge from the diffusion of money. This is where a full transition to the 'I-mode' takes place, and hence to Menger's rationality in using money: further uses of a certain kind of money can be based on individual intentionality, just considering the individual benefits of utilizing the artefact for individual purposes. For example, trust in the US dollar today, in spite of considerable uncertainties regarding central bank policies following the financial crisis, is strongly supported by the fact that it is still the prime currency in conducting international trade and holding reserves. This creates network externalities for economic actions which also sustain demand for the US dollar. These externalities, though emerging on the network level, are perceived as individual advantages.

In a more general way this implies that money is one of the core institutions defining the boundaries of markets and the patterns of 'marketization' in the economic system (Çalışkan and Callon 2010). This idea goes back to a long tradition of institutionalist thinking in economics, starting with the Aristotelian analysis of 'chrematistics' (compare Walsh and Lynch 2008: 25ff.; Binswanger 2013: Appendix) and continuing up to Karl Polanyi's vision of economic and social transformations. 'Marketization' is a process characterizing economic development which moves people beyond the constraints of subsistence production. Here, we observe complex interactions between social relationships and the emerging money-mediated transactions which have been scrutinized in many anthropological studies and which still play a role also in developed countries. Marketization is further determined by the moral regulation of the use of money, for example, in contemporary debates and practices of organ

transplantation (for a comprehensive treatment of the 'morality of money', see Walsh and Lynch 2008).

Therefore, the treatment of money as a mere transaction technology is one of the misleading ideas in standard economics. This has become more evident in recent advances in 'market design' which often tackle the task of creating efficient transactional technologies in the absence of money-mediated markets, where this absence often reflects moral constraints on what is still an economic process, such as allocating scarce human organs to patients in desperate need (Roth 2008). Money in the civil society should be primarily considered as a moral category, because it pertains to the level where the scope of markets is determined.

The other conclusion is that the entire set of institutional regulations of money is a defining feature of economic systems (Herrmann-Pillath 2013b). This is a 'macro' correspondence to the previous 'micro' argument. This role of money is most evident in analysing the system of 'financial capitalism' that was regarded to be the 'end of history' until its collapse in the year 2008. If we look at financial capitalism in detail, we easily realize that its defining features relate to the particular institutional forms governing the use of money and money-prices in the economy. In Chapter 5, we will discuss an illuminating example, which is the use of monetary incentives in corporate practices. There are seemingly compelling economic arguments for why the practices that spread in the past three decades are also the 'most efficient' ones. However, as we will see in detail in Chapter 5, these arguments do not pay sufficient attention to the performativity of the pertinent practices, which means that institutions also change behaviour in a way such that it reinforces and sustains these institutions.

The Aoki-type institutional circuit of money has to be seen as being embedded within a larger set of institutions which together determine the ways in which money is involved in the economic process, such as, for example, in evaluating and handling intellectual property rights by the market actors or shaping the role of capital markets relative to banking in the economic system of financial capitalism. Ultimately, this means approaching economic systems in terms of Hegelian civil societies, which build on shared understandings of institutions governing the role of money in creating the conditions for cooperation in the complex patterns of the division of labour.

Thus, the example of money and its analysis with reference to the previously developed conceptual apparatus demonstrate how an institution can emerge and persist with the help of the subjectively rooted mental mechanisms (continuity), the culture it creates and reinforces (performativity), and the networks of common acceptance (recognition). We showed how various mechanisms could be interpreted as parts of this general framework: somatic markers and the money illusion as psychophysiological foundations; fiat money and abstract calculative rationality embodied in accounting systems as performative self-asserting structures; and, finally, the political power that maintains this institutional structure in the dynamics of recognitive relationships.

Notes

1 Hayek's approach is based on the assumption that mental phenomena are physical phenomena in neuronal systems. He thus anticipated the entire modern development of connectionism in the neurosciences and neurophilosophy (overview in Garson 2012). As Ross (2011) emphasizes, the amazing modernity of his views partly reflects the fact that for several decades intellectual developments in these fields followed false tracks that were shaped by certain ideas in logic and mathematics which were later realized to be inappropriate for understanding the brain. In particular, Hayek also presaged the different selectionist theories of the brain that have been designed by neuroscientists such as Edelman (1987, 2006) or Calvin (1996, 1998) and philosophers of mind such as Dennett (1995) (for a concise summary, see Sacks 1995; for recent theoretical and empirical evaluations, see Fernando *et al.* 2012). In these views, and according to Hayek's original ideas, selectionist forces operate on certain basic structures of the neuronal system in the phylogenetic scale (that is, natural selection) and in the ontogenetic scale through human learning (that is, neuronal selection; compare Hull *et al.* 2001). Hayek presents a naturalistic account of mind, which even includes a functional explanation of the brain/mind gap (Levine 2009). Hayek also anticipated modern developments in evolutionary psychology. His evolutionary epistemology implies that we always face uncertainty and incomplete knowledge in understanding the real world, and this affects our own actions. Therefore, constructs such as 'the mental' of 'free will' are necessary to enable action in evolving systems of human interaction – that is, they represent population-level phenomena (and not individual ones, in the sense of a brain-mind identity thesis). This is why Hayek's descriptive and normative individualism appear to stay in tension with each other (Ross 2011). However, Ross's solution is also already implicit in Hayek's analysis of connectionism, because this population-level emergence of 'the mental' actually conjoins the evolutionary processes on different levels – neuronal, phylogenetic and cultural.

2 The term 'Bayesian machine' was coined by Karl Friston (Friston and Stephan 2006; Friston 2010). Friston concurs with Hayek in the view that there is no independent external reference for the brain when constructing a map of the world: the brain operates a statistical optimization process that aims at minimizing prediction error related to motor action. The predictions relate to states in the external world, but these states cannot be accessed directly: the brain receives sensory inputs, but the real causes of these inputs are hidden. The brain aims at achieving certain internal states which are positively valued. The realization of those states is influenced by external states; so, action caused by the brain aims to influence external states in order to achieve the desired internal states. Again, there is no direct mapping of those external states into the brain, such that goal fulfilment in the sense of the achievement of desired external states can only be signalled by achieving desired internal states. There are actually two dimensions in which adaptation of the mappings can happen: 'forward models' and 'inverse models'. The former refer to predictions, and the latter to the process by which the brain takes action in order to sample sensory inputs that match the given statistical distributions. Friston argues that this is only possible due to the sensorimotoric feedback loops which follow the general principle in order to minimize prediction error; all desired states of the brain would ultimately approach this optimal state, which statistically means minimization of so-called 'free energy' (a measure that formally relates to entropy in the information theoretic sense). The details of this approach do not matter for our argument here; what is important is that the brain operates a hierarchical structure of mutually adapting, yet independent, statistical distributions in different domains of neuronal activity: hidden causes are inferred from the statistical parameters of these distributions and their correlations (this amounts to answering the question of which unknown external causes would best explain

the changes in statistical distributions of neuronal patterns). This is overviewed in Figure 3.1.

3 For example, in a now classical paper, Barsalou (1999) argued that concept formation is based on 'perceptual symbol systems' – internal symbols emerge from the simulation of sensorimotoric circuits. For example, a hammer would be represented by the internal simulation of the activities of using a hammer, and these simulations become objects of further cognitive processing. In humans those perceptual symbols are closely connected with language; language, in turn, is a special form of motor action related to communication. In this approach, it is important that simulation is a universal principle also relevant for internal states: the brain can simulate its own activities and 'communicate' with itself, especially regarding cross-domain interactions. This self-referential simulation can be seen as a possible starting point for the formation of more abstract concepts. This view has the important philosophical consequence of vindicating Hegelian and pragmatist assumptions that concept formation cannot simply be seen as a categorization of facts about the external world, but always involves interactions between the cognitive system and the world.

4 At this point, it is interesting to note that Hegel exerted an indirect impact upon the brain sciences due to the adoption of Marxist thinking in the Soviet Union. This goes back to the work of Lev Vygotsky and is later exemplified in important contributions of Alexander Luria and Alexei Leont'ev, among others. In Vygotsky's view of the developmental process of human cognition, the notion of *internalization* is central. Consciousness and internal mental processes emerge from actions in the world, particularly social interactions. All internal representations are transformations of activities, and thus eventually obtain a different nature, but retain their connection with the external world. So, interestingly, while behaviourism dominated in the United States, promoting the idea of stimulus-response patterns and a simple representationalist view on sensory data, Leont'ev developed the idea of recurrent feedback loops driven by actions. So, following the logic of Vygotsky, it is those feedback loops which gradually become stable internal patterns of representation. This argument was cast in terms of Marxian dialectics, but goes back to the original ideas of Hegel. See more on this in Backhurst 1991, 2011.

5 Modern neuroeconomic research attracts a lot of attention, but also a lot of criticism. These criticisms are partly related to aspects of method and empirical validity (for an array of attacks, see Harrison 2008), but also to foundational concerns that mainly centre on the question of reductionism and the related issue of whether neurobiological facts are necessary to explain economic facts (compare the discussion in Bernheim 2009). In particular, there are authors who claim that even if neuroeconomic explanations are possible, they are still irrelevant in the sense that they do not add any substantial insights to economic analysis (Gul and Pesendorfer 2008). The question of whether neuroeconomics is necessary for economics would only be answered positively if some economic facts could be explained in a better way than by existing economic models, even falsifying existing models to a certain extent. So, understandably, one of the most prominent neuroeconomists, Paul Glimcher, pursues just this strategy, showing that reductionism is feasible, but also that additional insight is generated. Still, the issue of reductionism is open to debate. We think that the Hegelian approach can also resolve the internal debates among economists about the status of neuroscience in the discipline.

6 One of the leading brain scientists of recent times, Gerald Edelman, has already pointed out that the growth of knowledge in neuronal systems is only possible when considering connected brains (1987: 306ff.). Edelman grounded this reasoning in an analysis of learning that is in line with the more recent views that emphasize the role of endogenous 'Darwinian' dynamics in the neuronal pattern formation that maps sensorimotor feedback loops onto higher-level patterns of value underlying human phylogeny. However, Edelman concluded that this sort of perceptual category formation

cannot fully explain the accumulation of information in isolated neuronal systems, because these remain solipsistic. In other words, knowledge reflects the convergence of functions across different neuronal systems, and these functions are externalized actions which include communication among them. Edelman argued that the accumulation of information as 'adaptive learning' requires intra-species communication, though building on perceptual categorization. This idea remains at the centre of modern theories of social cognition and is, as we have shown, quite compatible with Hegelian concerns. Correspondingly, in the context of neuroeconomics research Oullier and Kelso (2009) and Oullier *et al.* (2008) have proposed the research agenda of 'social neuroeconomics' which approaches the internal stabilization of dynamic neuronal processes by external coordination among brains.

7 The notion that the development of human knowledge and the formation of biological information follow the same basic evolutionary principles has been most clearly articulated in evolutionary epistemology with the classical contributions of Campbell (1960) and Popper (1972). These are consistent with the generalizations of the connectionist paradigm that we have already discussed (see endnote 1; in particular, Hull *et al.* 2002). However, there are two different versions of evolutionary epistemology (for an overview, see Bradie and Harms 2012). One version states that evolutionary theory provides a set of formal principles that apply in different domains, such as biological information or scientific theories (compare Giere 1990). In this case, there is no claim that those different domains refer to one unified ontological notion of 'information'. The other approach states that human knowledge and biological information both belong to one evolutionary trajectory of information; this track goes back to Konrad Lorenz (1973) and his seminal attempts to reduce the Kantian transcendental analysis to biological evolution. In modern biology, these views connect with the modelling of gene-culture co-evolution which claim different degrees of convergence or divergence between selective forces across the different domains (Richerson and Boyd 2005; Jablonka and Lamb 2006); increasingly, these different evolutionary models are integrated into one comprehensive evolutionary model of 'inclusive inheritance' (Danchin *et al.* 2011).

8 Wittgenstein's philosophy of 'ordinary language' triggered the transition from referential theories of meaning to rule-based theories (overview in Lycan 1999). His famous reasoning about the impossibility of a private language is central to refutation of the idea of a purely internal 'mentalese' (overview in Candlish and Wrisley 2012). One cannot establish correct rule-following, Wittgenstein claims, without having an external benchmark. In the case of human behaviour, including language, this external benchmark can only be the behaviour of others. An isolated individual can never reliably check for the correctness of an internally established 'meaning' of a purely private sign. This is only possible due to feedback from others who establish the correctness of the word usage by showing the proper reaction to the meaning intended by the speaker. This implies, however, that rules of language use are defined only with reference to communities of speakers. Wittgenstein's reasoning has often been received in the context of hermeneutic and relativistic approaches, but it is also compatible with the evolutionary theories of language such as Millikan's (2005). In these approaches, meanings are seen as evolving functions in populations of interacting language users, with functions referring to successful actions relative to a certain criterion of selection (Neander 2012; see also MacDonald and Papineau 2006). Then, the 'meaning', although an internalist concept, can also be approached in externalist ways, such that the speakers' intentions do not matter at all for establishing 'meaning', only the reactions of receivers (as in Aunger 2002: 262ff.). This fits well with recent attempts at explaining the emergence of meaning in evolutionary game theory (for example, Demichelis and Weibull 2008; Skyrms 2010).

9 It is most straightforward to illustrate this point with a brief reflection on science (catching up with the role of science in Hegel's analysis of 'observing reason'; see

Chapter 2, endnote 2). Science is the knowledge of the world that we construct. However, we believe that this construction somehow grasps 'objective reality' independent from us (following the naïve position of 'observing reason'). But science is also a moment of objective spirit: modern science develops through actions upon the world, scaffolded by technology and reflections upon the resulting feedback. We cannot simply adopt a positivistic view on the 'data', as there are no data which are independent of the currently held theories. So, intrinsic in the picture of reality which emerges from science is the process of reflecting upon the methods that drive the circuits of data generation and action upon the world, focusing mainly upon the institution of the 'experiment' and the 'laboratory' (Latour 2005; Giere 2008). What is real depends upon the data and the mutual recognition of the ways in which those data are generated, interpreted and used in further actions on the world. Again, this follows the Hegelian heuristic of relating the mind to and dynamically identifying it with the objective spirit – that is, the totality of external institutions, norms and practices in collectives of human actors. The 'world' is generated collectively, and there is no other way to constitute reality as in the interactions within those collectives. In spite of the fact that Hegel is neglected by many modern philosophers of science, they share his basic insight, namely that there is no external anchor for us in fixing the idea of the world as an independent reality. What is 'real' is ultimately determined by reflecting upon the method and actions of science in a collective debate; there is no direct access to reality, and therefore the only 'reality' that we can know is constituted by our own actions.

10 Even in the revealed preference approach, the implicit counterpart of the 'rational agent' is the individual organism; however, this is by no means a necessary assumption. As we have seen, the difficulty with standard economic theory is that it actually allows for two different interpretations: internalist and externalist. The internalist perspective is represented in Glimcher's program, and is shared by behavioural economists who at the same time reject the rational choice program. Samuelsons's theory of 'revealed preferences' posits that empirical confirmations of the standard economic model do not confirm any assumptions about the internal operations of the brain, but only describe observed behaviour in a context that can be described by data accessible to economic theory. However, this is not just a methodological proposition that serves to relieve economic analysis of the need to detail the black box of the human organism, but is actually an ontological statement about complex systems (Ross 2005). It states that economic theory describes agents in the abstract sense, relative to the economic model of interactions that includes propositions such as maximization under constraints. This model cannot be reduced to neuroscientific facts, even though it matches with many of them. However, there is the empirical question of whether it describes the behaviour of human individuals, firms, single neuronal mechanisms or any other physical entity. Therefore, Ross's externalist view is non-reductionist although it accepts the economic model as an empirical theory. This implies that there is a relationship of supervenience between the neuroscientific substrate and institutions insofar as there is a manifold of institutions that can shape individual behaviour in such a way that the theoretical propositions of economics could hold, and hence also a manifold of behavioural patterns falling under the mathematical description (Ross 2012).

11 One example might help to clarify this point. Economic theory normally assumes that the representation of probabilities in the brain follows the mathematical conceptualization of probability. However, experimental research has shown that these representations may be quite different in different contexts. As Gigerenzer and others have shown in classical experiments (Gigerenzer 1996; Cosmides and Tooby 2005), the quality of decisions is very different if agents have to calculate probabilities in terms of mathematical representation or if the probabilities are implicit to the decision task, especially if the task involves social interactions. In particular, if probabilities inhere

in the experienced frequencies by which events occur, the mathematical correctness of decisions increases substantially, without involving numerical representations of probabilities as in the mathematical representation. The now common interpretation of this observation is that the brain operates as a complex system that has emerged through a long process of evolution such that it is adapted to certain features of the environment, especially social interaction. Against this background, standard mathematical representations of probabilities simply do not match with the common understanding of probabilities in the environments to which brains have adapted. In these natural environments, probabilities are immanent to information about frequencies. We might conclude that the brain has concepts about probabilities; however, these do not correspond to the current mathematical representations. But one cannot say that these common representations are non-conceptual: if people correctly assess risks in the Iowa gambling task, it would be wrong to argue that these are just 'gut feelings', especially if we consider the approaches to grounded cognition scrutinized previously. These concepts are not subject to conscious reflection, but still remain concepts.

12 Davis (2010) presents an illuminating historical account of the two schools of thought that both go back to the Behavioural Decision Research Program at the University of Michigan in the 1950s. The spiritus rector, Ward Edwards, wanted to introduce von Neumann and Morgenstern's expected utility theory into psychology. His students developed different approaches which coalesced into an internalist and an externalist program, respectively. The first one is best represented by the work of Kahneman and Tversky. Their prospect theory is an alternative conceptualization of the utility function which still pertains to individuals. The second line of thought is associated with Herbert Simon, who influenced Vernon Smith. This approach is close to Artificial Intelligence research and emphasizes the systemic and evolutionary aspects of cognition. Therefore, the assumption that human cognition is limited to the physical boundaries of the brain is not taken for granted. It is important to note that Smith (2003) explicitly refers to Hayek in his notion of 'ecological rationality'.

13 This difference between various forms of representation also emerges in experiments on prospect theory. Methodologically, this is different from the comparison of normative models of rationality with experimental results, because in this case one compares two different empirically generated results. Prospect theory can be regarded as a well-supported theory of behaviour under uncertainty, and it claims, among other hypotheses, that people do make systematic mistakes in estimating probabilities because they underweight high probability events and overweight low probability events. However, this only happens if the probabilities are framed in standard mathematical notations, as noted above (see endnote 11; for an overview, see Glimcher 2011: 383ff.). If test persons undergo a sampling procedure, such that they learn the frequencies of events, this relationship is reversed: they now overweight high probabilities and underweight low probabilities. In other words, prospect theory becomes contingent upon framing effects (Glimcher 2011: 385f.) A model of neuronal learning can explain this reversal by introducing a parameter that reflects the rate at which past experiences are deleted from memory. Then, if one considers a moving average of samples, there will be an underweighting of the low probability events in the moving average. This means that there is a principled difference between different modes of representing probabilities. Now, the experimental setting is an *institution* defined by the experimenter and includes all incentives and rules under which the individuals act, as well as, implicitly, the frames under which the action takes place. We would expect that similar settings in the real world might produce similar results; however, in the real-world setting, frames might mix. For example, financial decision makers act within both modes: they refer to quantitative data and mathematical probabilities, while also taking samples from series of financial transactions – that is, they operate in the learning mode. Thus, in reality much attention is paid to the *technologies of representation* that frame the decision-making of actors (Zaloom 2003; Beunza and Stark 2008).

14 This is most easily demonstrated with reference to a classical model of rational choice advanced by Gary Becker (Davis 2003: 55ff.). Becker's approach is important in our context because it represents an internalist interpretation of the standard model, sharing with Glimcher the claim that preferences can be reduced to biological mechanisms. However, this idea does not account for human learning. Therefore, Becker (1996: 26ff.) distinguishes between a set of fundamental and instrumental preferences that enable the fulfilment of fundamental preferences (hence, utility is 'produced'). For example, there is a fundamental preference for nutrition, but this is fulfilled with recourse to instrumental preferences that identify particular sources of food and ways of using them. Becker argues that the latter are learned, and that individuals actually produce basic 'commodities' by means of intermediate goods over which they form the instrumental preferences. He thus makes a distinction between preferences and 'tastes'. Preferences are biological givens; tastes are learned. For example, I might have a generic biological preference for stress reduction, but over time I develop a taste that focuses my expressed needs for this on alcohol: this results in Becker's famous rational choice approach to addiction as a result of rational learning. However, this entails a conceptual difficulty as far as the re-identification criterion is concerned, because biological preferences are only species-related, whereas instrumental preferences are individual. However, those preferences refer to human capital and social capital, which are both irreducible to the individual level and play a leading role in learning. Becker argues that individual preferences as tastes reflect the accumulation of human capital that enables individuals to express their preferences. For example, if I enjoy skiing, this presupposes that I learned to ski in the past. Without the capability to ski, I cannot express that preference, so I need to build the capacity first. However, I cannot do that in isolation, but rely upon others in order to learn how to ski. Since skiing, unlike walking, is not a natural capability of humans, this requires the process of imitation at the least, but often involves explicit teaching by others. However, this interdependence with the other implies that my preference for skiing cannot reliably identify myself through time. This is because I cannot know what my preferences would have been if I had not learned skiing; vice versa, as long as I have not learned skiing, I cannot know whether I truly have a preference for it. Therefore, Becker's approach does not allow for stable criteria of re-identification through time. The fact of human learning, once it is included into the standard model of preferences, means that we cannot argue without any doubt that individuals of the age of twenty are the same ones as those of the age of thirty. This also raises questions regarding the criterion of individuation: if I learn skiing from others, how can I reliably distinguish between my preferences and the preferences of others? I might argue that my preference for skiing is simultaneously shared by others, and this is why I have this preference. Therefore, the distinction between me and others becomes blurred (compare Sobel 2005, who relates the Beckerian analysis to the notion of interdependent preferences).

15 In economics, social identity has been analysed in Akerlof and Kranton's (2000) 'identity economics'. This is based on a generic assumption about human preferences, which, however, does not suffice as a criterion for identity (Davis 2007). This is the generic inclination for conformity in the sense that deviance partly creates negative emotions. Therefore, all human beings want to identify with others through the self-application of concepts, i.e. social categorizations. However, this argument does not need to rely on such an emotional basis because self-identification as such is only possible by making distinctions which themselves are based on categorizations. For example, if I identify myself as 'male' that depends upon existing social categorizations of 'maleness'. I cannot call myself 'female' while applying all of the criteria of social categorizations of maleness upon myself without contradiction. Therefore, a synchronic self-identification is impossible without categorization, but at the same time this makes complete and perfect self-identification impossible. In her social

identity, the individual is always affected by externalities that result from the actions of others that share this category. So, if I identify myself as male, this implies that all behaviours of males can be part of my identity. If I wish to exclude these from my identity, I have to make this explicit, with the possible extreme result that consensus is lost about the meaning of maleness; this in turn destabilizes my identity as a male. Therefore, one can argue that personal identity as a trajectory of change is also essential to stabilize social identity (for a related dynamic approach, see Horst *et al.* 2006).

16 A rare attempt to develop a formally concise economic theory that matches with these observations is von Weizsäcker's (2011) recent theory of adaptive preferences, which goes back to his seminal 1971 contribution. Von Weizsäcker argues that individuals manifest status quo preferences that give special weight to the current consumption patterns, thus leading towards a divergence in the valuations of the same patterns, depending on whether they constitute a status quo or not. At the same time he demonstrates that adaptive preferences can be formalized along the lines of the revealed preferences axioms and the tenets of welfare economics if one analyses the path of individual learning in the search for improvements of the status quo (which he calls the 'progress path'). One of the crucial formal conditions is that these paths are non-circular – that is, that they do not lead back to the original status quo. He presents evolutionary rationales for this approach, such as the need to avoid costly failures of overly rapid transitions to uncertain new states. This does not preclude the possibility of path-dependencies, however, because the search process is necessarily local, not global. Yet, it is possible to match the notion of adaptive preferences with standard conceptions of rationality. In the context of our argument, it is important to note that von Weizsäcker puts his theory into a larger philosophical framework when he emphasizes the peculiar role of the notion of preferences in economics. He argues that 'preferences' have *no descriptive status as positive economic propositions*, but serve as an analytical anchor for what is fundamentally *a normative proposition, namely that human individuals are free persons*. In this view, the standard assumption of the 'subjectivity' of preferences is not seen as a methodological device to keep psychological and other empirical approaches separate from purely economic explanations, as emphasized by Gul and Pesendorfer (2008), but is a formal definition of 'freedom' in the sense that a person is not driven by any other causal determinants in her individual choices, such as external pressures or internal drives. Thus, the 'constraints' in the standard maximization framework are seen as all those factors that limit personal freedom, and therefore enforce certain directions and tendencies of choice, and the 'subjective preferences' reflect the realm of freedom. Thus, economic theory can be interpreted as a theory that attempts an explanation of actions and patterns of interactions on the basis of the normative assumption of human freedom, which renders the entire theory normative in a foundational sense. In our view, von Weizsäcker's approach builds a bridge between behavioural economics and standard welfare economics, which is Hegelian in essence, in particular with reference to the concept of individual freedom and the role that manifest – hence 'revealed' – choices play in guiding the individual learning process that leads towards improvements.

17 In the neuroscience literature on human choice, this necessary dualism has been reflected in the conceptual distinction between the two brain functions of 'liking' and 'wanting' (for example: Camerer 2006; Berridge 2009). Economics simply assumes that the two systems are the same, i.e. that we want what we like. Building on the analysis of dopamine circuits, we have to acknowledge that the two functions need to be conceptually dissociated, because these circuits clearly distinguish 'wanting' from 'liking': for example, we want the delicious food in larger quantities, even though we do not like it because we feel overfed afterwards. This dissociation of 'wanting' and 'liking' means that the 'wanting' part is driven by conceptual consumption, and hence by the internal representations of consumption action (for a detailed semiotic analysis, see Herrmann-Pillath 2012a). The most obvious illustration of this is the widespread existence of dis-

ordered consumption or even addictions, which, in this view, are failures of the coordination between the wanting and the liking modules, such that wanting leads to negative effects, i.e. upon health and psychological wellbeing (compare Redish *et al.* 2008). In the case of many addictive drugs, there is a direct physiological mechanism that interferes with the dopamine circuits, biasing the choices made.

18 Consider the modern phenomenon of lifestyle consumption, such as being a vegetarian. This can express self-assignment to a particular social group, such as female professionals with a liberal political attitude, that is constituted in the personal networks to which the individual belongs, such as the social environment of a media company and suburban settlements, featuring material infrastructure such as restaurants and shops where these preferences can be realized, as well as the context of meeting people with similar preferences. At the same time, vegetarianism reflects a personal history that establishes individualization and is especially focused on certain past decisions such as the juncture when vegetarianism was adopted. Here the phenomenon of the narrative historicizing human action is also relevant.

19 In many experiments, utilities with and without the involvement of money have been directly compared. For example, Amir *et al.* (2008) have shown that there is a systematic difference between valuations for purchase options in terms of pecuniary values as compared with options for owning and enjoying the same goods. This means that there is no direct mapping from utility of goods onto utility as reflected in certain monetary values. One way to show this experimentally is to investigate the relationship between reservation prices and subjective utility assignments. The dissociation between the two is well known from many experiments, such as tests of anchoring, when subjects are biased by being confronted with a first offer price in negotiations that is generated by using the last numbers of their social security number, and then producing systematically different subjective estimates of reservation prices. In the experiments people are asked to assess their reservation price for a concert when being supplied with alternative information about its production costs, or they are asked to produce alternative estimates of expected pleasure when comparing different personal states during the concert depending upon whether the air-conditioning system is broken or not. The clear result of this experiment is that the reservation price is influenced much more strongly by the information about the costs, and less by the information about the expected pleasure, and vice versa. This means that monetary assessments are strongly influenced by so-called transactional cues – in this case, the information about the costs incurred by the producer of the service. Similarly, in other experiments people tend to reveal much less variation in their individual assessment of the disutility of working on certain tasks, and hence the minimum reservation wage necessary to induce them to accept that task, compared to the state when they receive additional information about the average market wage prevailing for that task. Thus, monetary valuations do not reflect the corresponding subjective evaluations of pleasure and reward, and they are systematically influenced by contextual determinants other than the latter. There is a range of experiments which point to a similar dissociation between monetary valuations and subjective assignments of utility as hedonic value, if one takes 'money' as a simple certificate that ensures the right to receive a certain good with a certain hedonic value. For example, in the context of prospect theory it has been shown that people respond differently to gaining certificates representing different hedonic values and to giving these certificates up. In the former case, people did not note a difference between the hedonic values, and so they treated equal monetary values equally, whereas in the case of loss aversion they showed a pronounced difference across certificates referring to different hedonic values (Trepel *et al.* 2005: 41). Observations such as these suggest that money is directly involved in activating distinct patterns of neuronal responses. This is also salient from experiments in which money unambiguously designates delayed rewards, yet triggers immediate emotional responses signalling gratification (McClure *et al.* 2004).

20 Shafir *et al.* (1997) present an explanation which focuses on the salience of nominal valuations in the setting of the experiments as well as in real life. These saliences find expression in the fact that, for example, a 4 per cent gain between two different points of time with 2 per cent inflation is regarded to be more valuable as a 2 per cent gain without inflation. There are many different scenarios in which this kind of apparent misperception takes place. For example, people seem to assess job satisfaction with certain salaries differently in absolute and relative terms, with relative terms referring to nominal rankings. Thus, people might report less satisfaction with jobs offering higher absolute wages if these are below a reference wage in the nominal ranking. Similarly, expressed satisfaction with wage increases differs considerably from assessments of the economic value of a certain wage, depending upon inflation: this means that even if people are able to correctly assess a wage increase relative to inflation, they would still believe that larger nominal increases lead to higher job satisfaction. The money illusion also systematically affects the comparative assessment of transactions: for example, if people compare two transactions which are based on different purchasing and selling prices at different points in time which involve inflation, they mostly compare only the nominal values and do not take into consideration the effect of inflation upon the real comparison between purchasing and selling prices. The explanation presented by Shafir *et al.* is based on cognitive biases towards the salient properties of items, such as contracts where nominal values are fixed. However, the problem is how to explain the fact that, as in the case of assessing job satisfaction, people express conflicting assessments at the same time. This seems to imply the significance of money as a primary reinforcer, as demonstrated in a brain imaging study by Weber *et al.* (2009). They check the Shafir *et al.* experiments against evidence that shows how nominal and real values find expression in differential activation of the medial prefrontal cortex which is the standard location showing the intensity of rewards. Activation patterns were substantially stronger for values which were nominally higher, though the same in real terms. Interestingly, they could even show that these differences in intensity were reflected in the direct subjective evaluations of the subjects as elicited by the Shafir *et al.* surveys.

21 Seabright (2004: 76) points out that money was often put into close relationship with sexual activity, and for centuries the word 'expense' stood for 'orgasm', possibly reflecting the emotional loss of tension that results from spending money (see also Hörisch 2000). This association between sexual activity and handling money is most obvious in the professional culture of financial traders; its pronounced masculinity is one of the implicit barriers for the increasing participation of women in that business (Klaes *et al.* 2007). Financial market activities are often compared with male sexual action (Hassoun 2005).

22 A fascinating example is China, where money plays an important role in popular religion, thus apparently having achieved a positive moral valuation, when, e.g. burning fake paper money as an offering to ancestors. Striving towards the accumulation of private wealth is seen as a positive obligation of a family head who cares for the subsequent generations. However, Wutong the 'God of Wealth', who might possibly help in these endeavours, actually goes back to a medieval Song dynasty version of Wutong that depicted him as malicious, cunning and dangerous, especially to women. However, there were positive views in some local cults. Overall, the Imperial administration of popular religion tried to suppress the Wutong cults. In Ming times, the popular interpretations of Wutong lingered between positive and negative views, and in many stories about the God he offers riches to young women in exchange for sexual favours, which are sometimes even accepted by parents as a blessing for the family. However, these episodes mostly have a tragic end. This reflects the association between the drive to acquire money and the dark '*yin*' forces of femininity and sexuality in late Ming times, which, again, led to official suppressions of the cult. Only in the eighteenth and nineteenth century did the Wutong cult gradually transform

into a neutral veneration of wealth and business, and was also replaced by other cults of Gods of Wealth that did not cause similar associations of debauchery, greed and deceit. The modern cults of wealth emphasize the bourgeois values of business, such as diligence and trust. Von Glahn (1991) argues that during the Ming dynasty, the institution of money proved to be highly unstable. Copper was in short supply, so imported silver gradually became the standard of value, though it was not minted regularly. The official bronze species could not be maintained, and was not even available in many areas of China, but the imported silver bullion was not safe and was traded only for its value as a commodity. So, counterfeiting was rampant, and this even drove the government to debase its own currency. This led to rioting and widespread discontent in the most developed regions of China. Only in the eighteenth century, when the Qing government started to exploit the Yunnan copper mines, could the regular supply of bronze coins be established and the institution of money stabilized, together with the growth and expansion of other institutions of the commercial and bourgeois society of Late Qing China. Apparently, this institutional stability was also reflected in changing popular beliefs about the relationship between morals and money.

23 If we look at the institutional development of modern financial markets, especially in the United States, the gambling metaphor seems ubiquitous (Millo 2007). This particularly concerns the futures markets, because here purely monetary contracts are traded without involving any real transactions. Futures markets originated in the trades of agricultural futures, and in this case at least the fiction of real transactions could be maintained. But laws prohibiting gambling in many US states actually constrained the development of other futures markets, especially regarding foreign exchange, i.e. transactions only involving money without any real delivery at later dates. Only in the late 1960s was this frame of reference substituted by another one which originated in economics and emphasized the gains in allocative efficiency from hedging and other forms of coping with currency risks.

24 This is important to highlight, as today there are many extensions of the economic exchange paradigm in biology which allegedly refute Adam Smith's original question of whether anybody has ever seen a dog conducting barter. In fact, many biological transactions can be interpreted as market-like transactions (Hammerstein 2001). This follows from formal elaboration of the biological notion of reciprocity (Trivers 1985). Such a way of thinking is also manifest in the re-import of biological theories into economics, especially in the context of evolutionary game theory.

25 Lea and Webley (2006) propose the hypothesis that money can 'hijack' the human instinct to trade, i.e. the special human capacity to conduct and govern reciprocal exchange. Then, money would assume the role of a 'perceptual' or 'cognitive drug' in triggering a biological drive without actually fulfilling the corresponding biological function. This sort of misappropriation of biological drives happens in many contexts of human behaviour which reveal certain dysfunctions, mostly classified as 'disorders' of different degrees, and less so as 'addictions'. For example, some people might search for sexual gratification in pornography, in spite of the fact that the original biological drive is not directly fulfilled. Or, in eating disorders the overconsumption of sweets actually damages the original biological functions. Although these disorders do not count as addictions, they still involve particular kind of desires, mainly triggered by culturally transmitted symbols.

26 For example, the role of 'contrived' goods is emphasized in Ofek's (2001) theory of the emergence of early barter and markets. Ofek offers two intriguing examples: fire and large game. In both cases, individual effort is necessary to maintain and gain the benefits, such as keeping alive a fire that can be used for cooking, warming etc. This benefit can be shared without individual costs with others. A large game kill cannot possibly be eaten in reasonable time, so giving away some parts of it does not come at an individual cost. However, in both cases this sharing creates incentives to free-ride

in the production of what can be both a private and a collective good, depending upon the application of sharing. So, Ofek argues that these contexts led towards the establishment of exchange relationships and ultimately reciprocal barter.

27 This has been experimentally supported in testing social contract situations (overview in Cosmides and Tooby 2005). One striking example is that of the Wason Task, which tests the material conditional in classical logic, and is cognitively simple. People are asked to relate which cards they have to invert if shown two cards with 4 and 7 and two cards with blue and green. They are asked which card they would need to turn in order to prove that all even cards are blue. Only a minority of subjects produce the correct solution, in spite of the fact that if they learn about it, they clearly state that they understand and know the material conditional. Evolutionary psychologists have shown that performance in this task is vastly enhanced if it is not presented as an abstract problem involving numbers and colours, but as a social contract problem involving cheating, such as an agreement to borrow a car and fill up the tank when returning it.

28 This is most evident in the emergence of the first coins that might count as fully-fledged money. When Lydian traders started to use electrum coins, this use actually mediated cross-culturally between Ionian peasant communities and Assyrians (for an insightful analysis, see Hutter 1994). The two ingredients of the alloy electrum – silver and gold – represented different cultural frames, with silver serving as a ritual good, sometimes also involved in long-distance economic transactions in Ionia, whereas gold was an indicator of wealth and status in the military society of Assyria. Therefore, originally the items that realized different monetary functions were not compatible with each other. This changed with the diffusion of the electrum coins which could be interpreted in both frames, leading to the rapid diffusion of the coins and the accumulation of wealth. Within two centuries, minting developed into an economic activity with deep relations to political power, especially in Athens where the monetary economy supported the emergence of complex institutional provisions for creating and maintaining public goods, institutional, infrastructural and military.

29 In 1978, when Simmel's Philosophy of Money was translated completely into English for the first time, there was an immediate reception in Laidler and Rowe's (1980) review article for the *Journal of Economic Literature*, which emphasized the compatibility of Simmel's ideas with modern economic theory and highlighted distinct contributions by Simmel, in particular the role of monetary stability for maintaining economic and social order, beyond the standard treatments in modern macroeconomic theory. Yet apparently this brief surge of interest did not result in sustained efforts by economists to include Simmelian ideas into their analysis of money. Our Hegelian interpretation may be quite contentious, though vindicated by recent Simmel scholarship on the *Philosophie des Geldes* (Gerhardt 2003; Goos 2004). In his contributions to academic philosophy, Simmel focused on Kant, which was certainly also a response to the predominant Neo-Kantianism of his times. However, his adoption of Kant was idiosyncratic, especially in combining Kant and Nietzsche (for an overview, see Leck 2000: 84ff.; Simmel developed a theory of 'individual law' that epitomized the Nietzschean glorification of the individual, see Köhnke 1996: 496ff.). The family resemblances with Hegel not only include the dialectical way of reasoning and the 'interactionist' approach to individuality (Gerhard 2003), but also Simmel's notion of 'labour' as a process of externalization and culture as an expression of human action which might have resulted from his interest in socialism (compare Köhnke 1996: 350) or his endorsement of the Great War as the culmination of the idea of the state (Leck 2000: 300). It is also important to note the line which connects Hegel, Simmel and twentieth century philosophical adaptations of Marxism, especially in Lukács (overview in Leck 2000: Chapter 6). In our re-appropriation of Simmel we only suggest that Simmel's approach fits with our interpretation of Hegelian principles, without

claiming that Simmel grounded his theories in a reading of Hegel (this is also the approach in Goos 2004).

30 For Simmel, the evolution of money proceeds in three steps, beginning with the emergence of money as an instrument to improve the efficacy of exchange, followed by the transformative effects that money exerts upon market exchange as embedded in the institutions of the evolving civil society, and finally completing this transformation in modern capitalism, in which money becomes the central institution in coordinating complex interactions between autonomous individuals (for an overview, see von Flotow and Schmidt 2003). Many standard approaches which build on the analysis of money as a medium for transactions remain at the first stage of this dialectic, and only those approaches that put money at the centre of the analysis, such as post-Keynesian views, qualify as grasping the ultimate state of this dialectical transformation.

31 These ideas find support in the analysis of preferences referred to above in this chapter. Following De Vries's (2008) account of the transformation of the household economy on the eve of and during the Industrial Revolution, we can state that individual preferences for certain goods are shaped by social valuations of money. This finds expression in the role of money as a status good and hence absolute prices as indicators of status goods. The deepening involvement of the household in money-mediated social interactions transformed subjective valuations of goods by shifting the preferences for leisure against work. The household became 'industrious' in the peculiar sense that individuals aimed at obtaining money in order to be able to buy those goods the prices of which signal status. In this view, one cannot simply say that the transformation of the consumer goods space merely reflected technological progress in better fulfilling given needs, such as improving the availability and quality of food. The money-mediated valuation of goods also transformed the original preferences for goods. This phenomenon can also be observed in many other contexts, such as status good consumption in developing economies where, as in the industrializing economies of the past, preferences for money-mediated signalling of status even crowd out individual needs for nutrition, resulting in states of relative malnutrition which are not caused simply by a general scarcity of supplies or poverty (Moav and Neeman 2012). This role of money as a status good necessarily makes preferences intersubjective in the sense that no individual can unilaterally determine status. The diffusion of money allows the expression of preferences for status in a socially commensurable way.

32 One of the central topics in the *Philosophy of Money* is the transformative *impact of money* and exchange upon the nature of *individual agency*, which is lost in standard economics (Rammstedt 2003). Simmel shows in much detail how even emotional stances and attitudes of individuals are transformed by the diffusion of money (which is related to the 'psychology of money' from which this work started out; see Simmel 1889). This is another vindication of the continuity principle, because not only is there a naturalistic causality working from somatic markers of social reciprocity to the money institution, but this institution, in turn, changes patterns of emotions. For example, Simmel argues that money enables the increasing indirectness of all relationships between means and ends (his '*teleologische Zweckreihen*'), such that money as a means to achieve other ends gradually emerges as an end of independent status. This produces various psychological transformations which change entire lifestyles in advanced monetary economies. For example, in his view the financial industry is a breeding ground for cynicism as a basic attitude towards values – or, the relative ease by which money enables access to goods (which combines with the effort needed to earn this money) changes psychological attitudes towards those goods, eventually ending up in a state of endemic dullness. Remarkably, Simmelian views have recently been vindicated by empirical research in psychology, such as Vohs *et al.* (2006, 2008). For example, merely presenting test persons with images of money without

actually involving monetary incentives is sufficient to generate distinct behavioural reactions described by the authors as 'self-sufficiency', resulting in a lower inclination to help others and putting larger physical distance between others in seating arrangements. Interestingly, the incentive effects of money also work indirectly: presenting a screensaver with money pictures elicits stronger performance motivation, but also a significant tendency to work alone. Other recent empirical evidence includes Gino and Moligner (forthcoming) who investigated the 'time is money' metaphor and designed experiments in which people were alternative primed with time- or money-related cues, showing that the former triggered much stronger ethical behaviour.

33 This view finds support in the experimental research we referred to in endnote 19 and which shows that monetary valuations and expected utilities do not converge for single individuals. Monetary valuations are shaped by the context of the transaction, such that, for example, fairness perceptions or knowledge about standard prices strongly affect the monetary valuation independently of the expected benefits from using the good in question. This implies that the standard economic view, which builds on the theoretical construct of marginal utility, does not hold empirically: reservation prices do not reflect marginal utilities, but rather are shaped by the context of the transaction. This is exactly Simmel's idea: the valuations which actors feed into the process of monetary exchange are already shaped by this exchange, and represent transformations of any kind of original 'subjective' valuation (Papilloud 2003a). The premise of standard economic theory does not hold; individuals do not enter into exchange relationships on the basis of their subjective valuations of alternative choices.

34 We should, perhaps, note that Simmel himself was not at all optimistic about the emergence of monetary culture. Rather, he was concerned about the dissolution of subjectivity in the alien structures of objective spirit. This is another point where the influence of Hegelian concepts can be traced in Simmel's work. The young Hegel was particularly preoccupied with the notion of 'positivity' illuminating these negative aspects of institutionalization. The whole of the Hegelian project can be regarded as a speculative attempt to overcome this separation of the subjective and the institutional caused by the ossification of institutions. Historically the notion of objective spirit was rediscovered by Wilhelm Dilthey, who could in some ways be regarded as Simmel's precursor (Leck 2000: 64ff.). For Dilthey the analysis of objective spirit manifest in the creations of human culture is essential for a self-understanding of subjectivity.

35 Let us illustrate this radical insight, drawing on Simmel's discussion of 'possession'. Simmel argues that the existence of money transforms possessive relationships: he uses the formula that money separates 'to be' and 'to have'. Under a feudal regime the possession of land does not leave the identity of the owner unaffected. Owner and land are intertwined, which affects the valuation of land as an asset: it remains embedded in non-economic relationships. Compare this with the modern issue of accounting for how a family business should value its assets. Many family business owners argue that there are important considerations here which go beyond mere principles of current market valuation, such as long-term orientation in the family line or a strong emphasis on the interests of future generations of family members. This view clashes with the modern market-based principles of valuation, which would value the assets of a family business according to current market values (the US GAAP 'fair value' principle that has become internationally binding due to the IFRS; for a discussion congenial to the current argument, see Perry and Nölke 2006). If a family firm goes public, this implies a break in valuation principles since a public company is fully subject to market valuation. If the principles of valuing public companies are transferred to the valuation of family businesses, the resulting monetary values also imply a transformation of possession, beyond its legal forms. In this case, the family owner would no longer consider the relationship with the specific material assets but only with the financial value of those assets, and would compare the returns neutrally across different possible investments of the financial assets, reflecting the market

value of the material assets. If the protagonists of modern accounting principles argue that only this perspective reflects the 'true' value of the assets, they argue in a Simmelian fashion, as far as the analysis of modern capitalism is concerned. Applying market monetary valuations would eventually turn the valuation of family business into an 'objective' category, for both owners and other investors: in particular, owners would be able to learn about the 'objective' value of their assets, which should guide their own decisions as rational individuals. This means that absolute prices matter absolutely: the standard of valuation is directly taken from the monetary values as established in the marketplace. Interestingly, this is explicitly mentioned in justifying the 'fair value' principle: reference to market prices enables convergent valuations across all possible investors, thus rendering accounting results fully commensurable. Previous accounting principles such as the historical cost approach are rejected on the basis of leaving too much space for 'subjective' valuations and hence manipulations of accounting data. For the owner of a family business, this was a specific advantage which left space for pursuing market-independent individual strategies and idiosyncratic views.

36 The transformative powers of money relate to the distinction between synchrony and diachrony in the analysis of money which we touched upon earlier (von Flotow and Schmidt 2003). In the diachronic dimension, absolute monetary values (as opposed to relative prices that matter synchronically) obtain the role of objective judgments mediating the transactions. Interestingly, this perspective leads to distinct thoughts about modern macroeconomic analysis. This is a vast field, so suffice it to mention two recent approaches. One is the new approach to monetary economics as proposed by Stiglitz and Greenwald (2003). In this approach, the role of the banking sector and credit is made explicit. Credit is fundamental because in credit relationships distinct informational problems emerge which relate to the asymmetry of information between lender and borrower. Credit markets are encumbered by a typical 'lemons markets' configuration because lenders can only assess average qualities of borrowers, but can never access all of the information available to the borrower about their uses of the loan. Then, individual creditworthiness is partly influenced by externalities caused by other borrowers. This analysis implies that there is no simple relationship between the general level of interest, monetary policy and the real economy. In particular, one cannot treat the interest rate as a price that equilibrates demand and supply of loanable funds, because it is determined on the deeper level of the factors that generate credit and creditworthiness in the economy. This view of the macroeconomy converges with other recent approaches, such as the theory proposed by Geneakoplos (2010, 2011). Geneakoplos adds detailed views on the role of leverage and collateral in driving the aforementioned externalities in the market process, and emphasizes the heterogeneity of agents in terms of their expectational states. Given the state of asymmetric and imperfect information in the economy, collateral provides an anchor for assessing the creditworthiness of a borrower. This corresponds to an 'objectivization' in market evaluations of the collateral. However, this implies that the general state of the market directly affects the value of the collateral, especially if the 'fair value' principle is adopted, as discussed previously. If this is combined with leverage on the part of the borrower, one can precisely reconstruct events that influence the state of expectations in the economy. Then, 'objective' valuations of assets that are generated endogenously by market-mediated subjectivities are causes of 'real' economic phenomena.

37 In Smit *et al.*'s (2011) critique of Searle's approach to money, the authors claim that a fully 'I-mode' explanation of the emergence of money is feasible in terms of a conceptual model that substitutes Searle's status function by a formula of the kind '*S* is incentivized to act in manner *Z* towards *X*'. Applied to the Menger scenario of barter, this formula posits that one individual would announce willingness to accept a means of payment in barter relations, and would also show commitment by divesting resources to this decision. Thus the individual creates the incentive for others to accept the new institution, resulting in a self-enforcing process. This conceptual

model makes an important point about the diffusion of money: once a certain nucleus of money-mediated transactions is created, the use of money manifests network externalities as well as other communication technologies. The technical benefits from using the medium of transactions increase with the number of 'subscribers' – that is, the more people use a certain currency, the more transaction opportunities will be accessible with this currency. Hence, we achieve the important result that the spread of the institution certainly can be explained in the 'I-mode', yet with the important twist that externalities between users play a leading role, and not just the benefits that accrue directly to the individuals in the ongoing transactions. That is, in spite of the fact that the individual decision to use money is taken in the 'I-mode', this decision creates an additional benefit to all other members of the community who use money because new transaction opportunities are created.

4 Hegel, ethics and economics

In this and the following chapter we will present Hegelian economics 'in action', dealing with empirical issues and policies, and further elaborating upon the normative dimension of economics. Our claim is that the Hegelian perspective can resolve the methodological difficulties associated with the combination of positive and normative economic analysis.

In the classical Robbins definition of economics as the science that coordinates scarce means with ends, the notion of ends involves a normative component. As we have seen, behavioural economics tends to evaluate empirical results as being failures of matching with the normative prescriptions given in the models of perfect rationality. The observation of empirical failure leads to the normative question of how behaviour can be changed in order to meet the standards of optimality and rationality, effectively making behavioural analysis normative.

This synthesis of positive and normative aspects in economics applies with a vengeance in the Hegelian framework. The normative dimension arises from the endogenous normativity of economic action. For example, preferences as institutions have normative force with respect to individual behaviour, representing the deontology that defines personal identity. The individual as an empirical phenomenon is a normative structure which cannot be evaluated from an external abstract standpoint. Yet, following Hegel we can ask which normative frameworks are most conducive to allow for the development of the individual, and this brings us back to Hegel's view on the ethical life. This normative life of the individual is geared towards the realization of freedom. In the subsequent chapter, we deal with policy issues and public debate and thereby substantiate our analytical argument in this chapter. This argument is also based on further explorations of the sources and meanings of Hegel's thought.

We take the example of Amartya Sen's approach to justice as a testing ground (see also: Boldyrev and Herrmann-Pillath, forthcoming). Besides being interesting and influential in itself, the perspective advanced by Sen focuses on questions which are also central to our argument as presented so far, namely the meaning and significance of institutions, and the ways of studying institutional change in normative terms. It can be demonstrated that these issues were quite close to Hegel's concerns; however, Hegel does not play any role in Sen's thinking,

thus revealing a common attitude of economists. As we have seen in Chapter 1, this neglect apparently dates back to the close association between Hegel and Marxism, and to the view of Hegel as an adherent of state-controlled economic systems. This simplified portrayal remains at odds with the notions of markets and democracy which underlie modern economic thinking. However, as we have shown, this view certainly distorts Hegel's original ideas, envisioning a proper balance between free markets and government intervention for the sake of the public good (Ver Eecke 2008). Moreover, modern positions of political liberalism, such as Rawls (2001), are open to a relatively wide range of possible alternative economic systems. Given this substantive and interpretive leeway, preconceived notion of Hegel as a protagonist in a state-controlled economy needs to be abandoned as biased and lacking in systematic justification.

We suggest another perspective. The market itself is a moment of ethical life, grounded in the institutions of civil society. This does not mean, however, that market values would suffice as an ethical foundation of a free society (the 'minimum morals'; compare Baurmann 1996). Although markets do manifest certain elements of ethical life, such as the principle of mutual recognition as persons, they have to be integrated with non-market institutions of civil society. We restate Hegel's argument that these institutions are the *associations* that involve cultural formation, both moral and professional, or *Bildung*. In particular, we argue that this view establishes the possibility of formulating *universal ethical values in concrete historical contexts*. This reference to associations can be extended to include the *corporation* as an important institution in modern market societies. Today's corporations can be seen as cooperative ventures, or as manifestations of ethical life. We suggest that in the modern globalized economy, corporations have become media of universalization. Along with actualizing human labour as a universal human activity they can also participate in producing the practices and values of rational and free life. It turns out that the hierarchical organizations Hegel refers to as associations may be regarded (in their mission of promoting universality) as a prototype for modern corporations, which do not constrain freedom, but rather, by a dialectical inversion, actualize it.

The performativity of political and ethical values

In Hegel's thinking, the notion of 'just' or 'rational' institutions can be thought of only with reference to historical progress. Anticipating the discussion below, we can briefly formulate our main thesis: whereas modern political economy and political theory often take a hypothetical state of original individual freedom or some other normative ideal as a point of departure, Hegel posits that individual freedom can only be the outcome of institutional evolution. Institutions constitute the persons as citizens who can then partake in an inclusive and free political order.[1]

But how can we know that institutional change embodies progress towards increasing liberty if our own valuations as persons depend upon the existing

institutions (this problem is familiar from welfarist theories of ethics; see Hausman and McPherson 1996: 79ff.)? We could approach this problem by drawing upon the *performativity of political and ethical values*. Above, we were dealing with performativity as the self-expressive unfolding and dynamic embodiment of ideas. As we have seen in Chapter 3, in modern conceptualizations we can identify a whole range of cognitive and behavioural mechanisms through which performativity is executed. The interdependence of values and institutions demonstrates the workings of these mechanisms.

Performativity would imply that the historical development of institutions goes hand in hand with the diffusion of values that support increasing conformity of individual behaviour to these institutions, thus reinforcing their diffusion. *Ideas become embodied and foster themselves while being materially mediated.* This is a clear deviation from contractarian views, which assume that there is a hypothetical position of choosing between institutions whereby no causal interaction between those institutions and values is involved. If institutions are performative, we have to accept that values cannot be stated independently from institutions; hence, they do not provide an independent basis for evaluating those institutions.

Performativity is methodologically important for ethics because it implies that there are no external anchors for values. This is where Hegel offers substantial insight: a central concern of Hegel's original theory was to present a *non-foundationalist theory of values which nevertheless allows the construction of a set of universalist ethical claims*. This original project established the foundations of modernity as we know it today. Until today, however, non-foundational theories face the problem of *relativism*. We shall elaborate on these issues below.

Some recent developments in empirical research on political systems and institutions seem to support the performativity thesis in this context. One is the renewed interest of political science in the role of ideas in the emergence and maintenance of institutions (see the seminal collection of papers by Béland and Cox 2011, which build upon earlier contributions such as Goldstein 1993 and Blyth 2002); the other is experimental research on trust, social preferences and attitudes towards cooperation (for example, Herrmann *et al.* 2008; Bohnet *et al.* 2010; Gächter *et al.* 2010). Both approaches can be seen as instances of the performativity of social systems. They involve self-referential knowledge, symbolic media of communication and behaviour corresponding to rules. In the Aoki framework deployed in Chapters 2 and 3, this refers to the intermediating role of sign systems in determining behavioural dispositions. The latter can be restated as 'values', 'preferences' or 'beliefs'.

Let us look at the experimental research on values and institutions in the performativity perspective. Experimental economics can be seen as being performative on its own, for the experimenters create artificial settings to which the subjects adapt their behaviour (Guala 2007). In the established methodology of economics, this is considered to be a serious weakness, as there are limitations to transferring the results from the lab to the real world where causal forces might

differ (Binmore 2005; Kirman and Teschl 2010). However, in our context we can advance hypotheses about similar *patterns of performativity* that occur both in the lab and in the real world.

In a particular class of experimental games – the public goods games – participants are requested to contribute to a common pool, and they will obtain a return from their investment independent of their actual contribution. There are strong incentives to free-riding, since the actual contribution cannot be observed by others. Typically, experimental subjects contribute more than a purely rational agent would contribute, but also less than required for achieving the social and individual optimum (for an extensive survey, see Wilkinson and Klaes 2012: Chapter 10). The great advantages of considering experiments like this in social and political philosophy is that we can clearly identify and measure social optima, and the incentives for action are clearly aligned; finally, there is only a small degree of interpretive leeway regarding the outcomes. In this context, performativity implies that we would not observe a direct mapping between certain institutions and outcomes as measured by the social optimum, but this relation is mediated by the values of the subjects that are, in turn, dependent upon the institutions. Then, in principle, performativity is observable in the fact that approximations to the optimum can happen with different institutional regimes that trigger different values. Hence, the social optimum cannot properly serve as a benchmark to rank institutions: different rank orders result, depending on the performative connection between institutions and values. Apart from this mediation, no system of judgment is possible, and this is what is understood as *relativism* in this context.

In the literature on public good games, the institutional environment is often modified by including the punishment of free riders, which would be enforced by the experimenter as a 'third party'. The threat of punishments clearly increases levels of cooperation. Most interesting, however, are the 'weak punishments' which entail a loss to the cheater, but do not fully outweigh the incentives for cheating. In this case the underlying institutions, along with direct incentivization, also involve expressive functions (Benabou and Tirole 2011; Bowles and Polanía-Reyes 2012). Their expressivity reflects the role of institutions as values, or, closer to the models, public representations of proper and expected behaviour in a population.

An important version of these games involves asking participants to vote on whether they wish to introduce such a punishment rule. In samples with Western subjects this 'democratic procedure' substantially increases levels of cooperation, i.e. there is a 'democracy premium' (Tyran and Feld 2006; Dal Bó *et al.* 2010; Sutter *et al.* 2010). This result has been interpreted as proof of the societal value of democracy beyond the direct impact of voting schemes. If people are included in the process of rule-making, rule compliance is enhanced. This approach tacitly assumes that the individual valuation of democracy is universal across human actors, such that there is no scope for performativity of institutions. Universally, democracy would rank as an optimal institution in terms of generating social optima in cooperation. Outcomes and institutions would be unequivocally related.

Vollan *et al.* (2013) conducted the same experiments in China, with samples of students and rural workers. The surprising result was that there is no democracy premium whatsoever in China, and in the case of workers it is actually a disadvantage. However, another variant was also tested, namely that the rule was imposed by the experimenter. This 'authoritarian' approach showed a strongly positive effect on levels of cooperation. Interestingly, the student sample revealed some positive effects of democracy, apparently demonstrating some social change, but the 'authoritarianism premium' was there as well. Thus, in the Chinese experimental setting 'authoritarian' rule enforcement actually produces welfare improvements as a result of the higher levels of cooperation it induces. In comparison, the introduction of 'democracy' leads to relative losses as compared with the authoritarian regime.

How can we interpret these results in the current context? The experiment shows that there is no external benchmark for evaluating the two institutions (the democratic and the authoritarian rule of punishment) in the context of different societies. In the Chinese experiment, the authors tried to explain the observations by adding a survey on values and attitudes. The observations appear to be strongly influenced by a set of values that reflect obedience to authority. This suggests that since the Chinese participants live in an authoritarian country, authoritarian values are part of their socialization within this institutional regime. Therefore, they do not react strongly to the introduction of democratic procedures. We cannot compare the two different regimes by the external benchmark of social welfare, because the reaction to incentives that drive the generation of welfare is itself dependent upon the prevailing institutions.[2]

In the Chinese context, the authoritarian institutions are performative because they change the way that contextual incentives influence the values which define behaviour. Then, the authoritarian institutions can be associated with higher levels of welfare in the same way as democratic institutions, since they both trigger cooperative behaviour, resulting in higher levels of public goods, given the performative loop between values and institutions. However, it means that welfare analysis cannot be used to evaluate those institutions as an exogenous standard. The only alternative would be to assume a state in which Chinese individuals are ripped off their cultural and social embeddedness, such that reference to a generic measure of institutional progress would be possible. For example, we could identify 'democracy' as the desired best state in this context-free setting and then compare the two institutions relative to this ideal-typical state. But we cannot justify this measure with reference to the concrete historical setting and the evaluations of the participant subjects who cannot act as 'de-contextualized' individuals.

The implementation of value surveys in experiments involves the activation of self-referential knowledge. This differs from the identification of values in observed behaviours by inciting reflective thought from the agents who need to consider the proper response to the survey questions. Experiments create realities, and this conscious design is guided by the experimenters' ideas and beliefs on certain values (such as propensity to cooperate) and the ways of interpreting experimental events in light of these intellectual constructs.

This is a specific case of a more general phenomenon: the performative power of ideas discussed, inter alia, in the recent literature on the relationship between ideas and institutions in political science. *Ideas* are regarded as fixing stable institutional and behavioural patterns in a complex and uncertain world (Blyth 2011). This approach is congenial to the Aoki model in assuming that actors simply do not have enough cognitive capacity to be able to predict and control complex interactions in a similarly complex material world. This is certainly true of economic systems as well, in which even sufficiently robust *ex post* explanations are a rare achievement.

In this context, the stabilization of certain behavioural patterns is an essential constituent in the creation of stable institutional outcomes. In particular, the adoption of particular ideas may influence behaviour in such a way that outcomes are generated which confirm those ideas. Ideas become a stabilizing force irrespective of whether they are in any way true. For example, national trade policies are an important factor in determining the course taken by the world economy. However, they are strongly influenced by shifting ideas about economic policies (Goldstein 1993), and the convergence across countries in formulating certain policies, in turn, drives the global economic process. Since we cannot overlook the complexity of causal contingencies in the global economy, shifting patterns of policy coordination may not be directly attributable to real economic forces. What really counts is the adoption of institutionally embodied ideas and policies.

On the actor level, there is no way to 'objectively' define the interests of different actors in the political process and then apply pertinent analytical tools to explain the outcomes (Weber 1985: 411ff., 441ff.; Hays 2011). In the parlance of game theory, we cannot anchor the measurement of pay-offs in the perspective of an external observer who would measure those pay-offs in a way commensurable with the perceptions of internal actors. The coordination of ideas across actors is immanent to coordination of their actions, and hence performing the systems in which they act. This coordination mainly happens as a part of the political discourse that mediates ideas, while ideas influence the incentivization of action in a context-bound way (hence, for example, Schmidt (2008) may speak of 'discursive institutionalism').

Thus, both experimental economics and ideational research in political science suggest the performativity of institutions. Institutions, behaviour and cognitive structures form a totality unfolding in both the 'mind-to-world' and the 'world-to-mind' directions that stabilize each other.

The difficulty of identifying an external benchmark for evaluating institutions remains at the centre of Sen's discussion of justice. Against this background, a discussion of Sen's approach to ethics and institutions can deliver important insights for further developing the Hegelian framework for economics, especially with regard to policy implications.

Sen's conception of 'realization-focused comparisons'

Sen (2009) distinguishes between two basic approaches in evaluating institutional change. One is 'transcendental institutionalism', and the other is 'realization-focused comparisons'. Transcendental institutionalism is immanent to the contractarian view sketched above. In this perspective, there are context-free theoretical arguments for how and why we can posit certain institutions as the best ones.[3]

From Sen's own perspective, transcendental institutionalism neglects the fact that in the real world individual preference orders are never complete and value judgments of different individuals are based on different principles. As an alternative solution he proposes 'realization-focused comparisons' that evaluate institutional change in terms of changes relative to the *status quo*, as evaluated by the participant observers. There is no reference to a theoretically envisaged ideal state, but only to historically realized states and improvements relative to them. Hence, the issue of who partakes in realization-focused comparisons, and how far the benchmarks of evaluating institutions evolve endogenously, is important.[4]

Sen's approach to realization-focused comparisons can be given a Hegelian twist if we consider certain weaknesses which are well recognized in the literature. One of the most detrimental drawbacks is that Sen does not present detailed and convincing examples of how his approach would work in the case of real-world institutions, beyond obvious cases such as starvation (Shapiro 2011). He even refrains from presenting solutions to his favourite example of three children who wish to receive a flute, and differ in the potential claims they raise: one claims to be the only one who knows to play it, the other is so poor so that she might never be able to afford a flute, and the third made the flute, but is unable to play. There is incommensurability of fundamental values here, because the libertarian will reach a different conclusion than the egalitarian, and eventually the basic principles matter. However, as Shapiro argues, there is even more space for possible solutions – for example, arguing that other children will enjoy the music if the one who plays the flute best receives it , and so forth.

Another problem is that Sen builds on the notion of 'impartiality' developed by Adam Smith and reformulated as 'open impartiality'. But there is no necessary relationship between the result of democratic procedures and what might be seen as an optimum from the impartial viewpoint of justice (Shapiro 2011). As we shall see, this is exactly the juncture at which a possible Hegelian turn comes into play.

Open impartiality has to be seen against the background of Sen's critique of transcendental institutionalism. The first source of troubles is that exclusive reference to an ideal state does not provide meaningful criteria for comparing actual states which are all deficient in terms of distance from the ideal. From an economic point of view, this is easily apparent (this is our argument, not Sen's): for example, if one compares states with different distances from the ideal state, the transformation into a state with less distance involves costs of change which have to be carried by the actual participants of the process. In spite of the fact

that the distance might be identified in exact terms, the relative advantage of an actual change might differ from this assessment – thus, however, blocking the transition to the new state. In other words, transcendental institutionalism is meaningless for determining policy choices between actual states which in turn generate costs of change which have to be included into the comprehensive evaluation of current changes.[5]

The other weakness of the contractarian approach, from Sen's point of view, is that it is membership-based, implying that all sorts of voting rules affect the evaluation of institutional change and that the views of non-members are not considered. But recent transitions to 'free societies' were characterized by the expanding scope of inclusiveness, such as extending voting rights across social groups. Membership issues are also at stake when considering public opinion beyond the scope of social contract participants. For example, members may agree on the discrimination of women, but non-members may disagree. This regularly happens in the modern world, such as in case of international concerns about female circumcision in certain countries. In the contractarian view, the opinions of non-members do not matter at all. There are different degrees of involvement, as we will discuss in the next chapter, particularly regarding the role of externalities. Yet, if, for example, female circumcision in one country does not cause any externalities in other countries, the contractarian cannot convincingly justify the intervention of global public opinion into domestic affairs. In this particular sense, Sen's theory certainly qualifies as a conceptual foundation for creating a global public in institutions such as the United Nations.

From a more general perspective, even in a hypothetical situation of social contract there can be differences in values independent from their immediate material interests, such as in the case of the three children briefly alluded to above. This point follows Sen's (2002) extensive research on the notion of rationality. In these discussions, Sen argued that genuine 'rationality' also refers to the criteria of rationality, well-being or normative commitment a person decides to apply. For example, an agent might forsake certain material interests in order to achieve religious ideals. Although all kinds of behaviour could be 'rationalized' by paying the price of tautology, this clearly implies that rational people can still disagree on certain foundational criteria of choice in the original state. This includes the very foundations of the social contract procedure, such as assumptions on authority and moral norms. For example, submission to a religious leader means to give up personal freedom; the question is whether this can be permitted in the notion of individual freedom.

In sum, Sen argues that contractarian approaches can only establish principles of an undesirable 'closed impartiality'. His discussion boils down to the conflict between parochialism and universalism in moral judgments and conceptions of justice. Sen claims that contractarian approaches such as transcendental institutionalism cannot achieve truly universal judgments, but eventually fall prey to parochialism of values, because of the necessarily formal reference to particular communities. That is, in spite of the generality achieved by constructs such as the 'veil of ignorance', the relevant community, its social structure and the

implied range of possible social states of individuals remain contingent and bound to local circumstances. This is a remarkable conclusion because it is clearly at odds with the universalistic claims of transcendental institutionalism. This surprising result follows from the observation that due to the ways those universalistic principles would be realized in concrete historical settings, one would always end in parochialism. Therefore, it is the *procedural* aspect which eventually renders realization-focused comparisons more powerful in achieving universalistic judgments. This is implied by Hegel's critique of Kant: only the historical unfolding of real-world institutions can give rise to the realization of universalist moral claims.

Smith, Hegel, Sen: family resemblances of thought

Hegel: the missing link between Smith theory of morality and Sen's notion of justice

In his argument in defence of realization-focused comparisons, Sen draws quite heavily on Smith, and, in particular, on his *Theory of Moral Sentiments* (TMS). But Smith's moral perspective was also accommodated by Hegel.

Hegel rarely cites his sources; in the intellectual tradition of his times, scholarship also expressed itself in the capability to decode those implicit references.[6] There are good reasons to assume that Smith exerted a certain influence over Hegel. However, we can only identify this influence by studying the systematic connections between the views and arguments of both authors. This has been done by Nuzzo, who explicitly argues that 'Hegel places Smith's idea of morality at the heart of the ethical life of modern society' (2010: 44). In order to recognize this point, it is worth taking a brief look at Smith's moral philosophy without introducing too much original jargon.

In the TMS, Smith shares with Hegel a non-foundational approach to ethics. He also adopts an historical view on morality, especially in the sense that the 'natural morality' of real-world people – his primary concern – evolves in the context of various reference groups, thus being institutionalized.

Smith builds this general account on a theory of human nature that does not posit 'rationality' as a given. Human beings are seen as complex dynamic entities manifesting different sorts of 'passions' and 'sentiments' which struggle to gain dominance over actual behaviour (thus anticipating many modern views, including behavioural economics; see Ashraf *et al.* 2005). One emotion which plays a particularly important role is that of 'fellow-feeling' (for an extensive discussion, see Sugden 2002). Fellow-feeling refers to the primordial human satisfaction with the presence of others, and the positive feelings that result from recognizing one's capability to feel with others. Fellow-feeling combines with a particular cognitive capacity, which is 'sympathy'.[7]

The cognitive process of sympathy primarily leads to the reconstruction of another's feelings in terms of one's own imagined (not 'felt') feelings if one puts oneself into that same context. Therefore, Smith can even argue that one can

sympathize with the dead, in spite of the fact that there are no original feelings at all that might be reconstructed. Fellow-feeling enables a special form of positive emotion about the congruence between the reconstructed and the actual feeling of the other, as reflected in her expressions. For example, if I view misery and I reconstruct circumstances which recognize the similarity between my reconstruction and the expressed feelings, this congruence is a joyful experience of shared human feelings and opinions. This approval and the judgment about the propriety of action is the founding stone of human morality, because it opens up the possibility of viewing the same situation from the standpoint of different observers.

Sympathy as the capability to develop and compare different perspectives is given a prominent role in Sen (and, as we saw in Chapter 2, in Binmore's approach to game theory). The methodological instrument for Sen's analysis is given by Smith's notion of the 'spectator', or observer, in modern parlance. It is an internal cognitive function which allows observation of oneself, and which enables a person to take the position of another person in order to observe both their's and one's own position. Smith argues that this capability is fostered by social interaction, driven by primordial feelings in the first stages of moral evolution. Thus, in the family there is an emotional basis for being able and actually pushing oneself to take the positions of other family members. Later, this capability is sublimated and rendered more abstract in social interactions with broader scope.

The driving force behind these developments is the human desire for approval. All relationships of approval refer to the position of spectators. The aforementioned reconstruction of feelings and the comparison with expressed feelings is a relationship of approval: for example, if I perceive a gap between my reconstruction and the expressed feelings, I might express disapproval, thus acting as an observer. This expression of disapproval is crucial in kick-starting moral evolution, because the other, independently of how she reconstructs the entire situation, at least desires approval from her counterpart, and therefore might feel compelled to reflect upon the disapproval, thus possibly even reconsidering her own expressions of feelings. In other words, moral development is possible because I can adopt the position of others in order to judge the propriety of my own behaviour, which rests upon my capability to do the same with others.

In moral judgments, the capability of taking and comparing the positions of others is necessary in order to weigh different subjective moral views against one another. Here, Smith elaborates upon the role of resentment, arguing that social order can only be based on justice, and not on benevolence and other forms of altruism. Justice refers to the human capability of feeling sympathy with the resentment of others who are negatively affected by some action. It is thus mainly seen as retributive justice, because resentment is expressed in punishments, considered as retaliation. A moral judgment would be based on weighing sympathies with different positions of observation, referring, for example, to the person who feels resentment and to the person who is the object of punishment and feels

resentment in turn (compare Broadie 2006). It is important to see that this applies for both the participant actors and the by-standing observers. A person might cheat another person who retaliates. The first person is assumed to be able to imagine the resentment of the other in recognizing the cheating. The other is also able to imagine the resentment of the former in being punished. Finally, a third party is able to sympathize with both feelings of resentment and may weigh them in comparison; actually, this can also be done by the participants. Out of this interplay of the positional stances that can be adopted by different observers, social interaction and discourse might eventually lead to the position of an Impartial Spectator. This is no longer a third party position, however. The Impartial Spectator is a result of individual moral development and means that a person becomes capable of applying justice in a neutral way for others and for herself.

Moral development is thus the search for approval by the Impartial Spectator, achieved via an ongoing process of communicating disapproval and approval. To restate the important point here: this approval and disapproval do not refer to the actions of certain people, but to the feelings of resentment that others have towards these actions. This explains why Smith's moral theory is at least partly universal. Reference to resentment raises the level of analysis to an abstract argument, in which the specific outcome of moral evolution can be open-ended.[8]

Some commentators on Smith have seen a close affinity with Kant, as far as the Impartial Spectator is concerned. This point has been most cogently made by Tugendhat (2004) who argues that Smith combined a (subsequently) Kantian idea of categorical imperative with the congruence of moral affects, the former actually moving the latter onto a universalistic level, for the Impartial Spectator takes the position of 'anybody'. This is what Tugendhat calls 'universalistically approved intersubjective attitudes': for example, the resentments of different people involved in social interactions are evaluated from the impartial position, and, taken together, this results in particular moral propositions.

However, as the discussion of universalism and parochialism in Smith has shown, Tugendhat's argument cannot convincingly bridge the gap. The reason for this is that Smith's Impartial Spectator does not fall from heaven, but originates in actual discourses which involve real spectators and their cognitive reconstructions of different positions. 'Anybody' in a particular social context is never 'anybody', but is in fact a member of the particular community engaged in social interaction and the related moral discourse. Therefore, many Smith commentators have argued that the Impartial Spectator is simply the dominant opinion in a particular society or cultural circle (for a survey of the debate, see Forman-Barzilai 2006, 2010). In other words, there are limits to universalism in the sense that a 'view from nowhere' does not exist, which would be reflected in a purely formal interpretation of categorical imperative, and what can be attained are universalistic claims within a certain cultural setting. Forman-Barzilai (2010) suggested that Smith can only support the notion of 'commercial cosmopolitanism', which seems to come close to the aforementioned 'minimal morals' view: since only market relations can be global, it is only within this context that we can achieve truly universalistic moral viewpoints.

However, Nuzzo (2010) suggests that markets themselves may contain the roots of universalistic morality and, in a sense, that differs from the aforementioned argument on 'minimum morality' (e.g. Baurmann 1996, who rejects Smith's moral theories in favour of his economics). This leads us to Hegel's model of civil society and to Smith's view on the relationship between markets and justice. Both Hegel and Smith believe that markets can only operate as elements of the civil society, and that implies a much stronger moral standpoint than merely adopting and universalizing moral standards that make markets work (for a related analysis, see Neschen 2008: 178ff.). Admittedly, Smith himself became increasingly disillusioned with regard to the commercial realities of his times, taking the view that the pervasiveness of status competition and 'deceit' in the market in fact undermines morality. But this market pessimism actually reveals the necessity for embedding markets into a more encompassing moral framework.

Following Nuzzo, we can say that Hegel resolved this conceptual difficulty in his theory of the civil society.[9] The Smithian logic of sympathy is raised to a more abstract level by the concept of recognition. In civil society, only by becoming a 'citizen' can the individual receive universal recognition as an individual. Hence, it is the institutions of the civil society that incorporate the Impartial Spectator, which is no longer an internal standpoint but is externalized in those institutions (in particular, it means that individual consciousness cannot be the ultimate source of universal moral principles). Hegel learned about political economy and markets as the core institutional feature of the civil society revealing the higher level of abstraction to be achieved in moral evolution. But 'civil society' refers not just to pure 'markets', but also to the markets as a stage of development towards the state (compare Neschen 2008 and our sketch of Hegel's political economy in Chapter 1).

The tension between abstract moral principles and concrete moral obligations in particular human groups can be dialectically resolved in the historical manifestation of genuine 'individuality', which is precisely the civil society or the individual in civil society under concrete historical and political circumstances. How does this happen? Hegel, and some Enlightenment thinkers who inspired him, provided the answer: the key mechanism is the universalization of mutual recognition in the web of contractual relations between individuals in the civil society, an open-ended and infinite mechanism which does not impose any discrimination against individuals based upon particularistic properties (such as religion, race, etc.).

Markets and money-mediated relationships are universal in the sense that the individuals, while enjoying full autonomy of action, experience a dependency upon the entire system of the division of labour. In other words, universalization of competition and universalization of cooperation go hand in hand in market evolution, and it is the conjunction of both that makes the system of justice the bedrock of market society. If I pursue my self-interest, I can only do this by recognizing the self-interest of anybody else and drawing upon the recognition of others (for the related Smithian perspectives, see Mehta 2006).

In most simple terms, the markets of the civil society are collective enterprises, and not simply meeting places for asocial egoistic individuals. For this reason, civil society enables universalistic moral judgments. Markets are forms of universal cooperation, and because of that they obtain the function of a moral institution.

This view differs from mere 'commercial cosmopolitanism' in the way that the cooperative principles are actualized in markets. We will show that this is where Hegel's emphasis on Estates and institutions comes into play. Sen's critique of Kant was also anticipated by Hegel.

Hegel's criticism of Kantian ethics: prefiguring Sen

One of the alleged 'transcendental institutionalists' in Sen (2009) is Kant. It is not just an issue of historical justice to be restored when one notes that Sen takes up many arguments very similar to those advanced by Hegel in his polemics with Kant. It is also of systematic relevance for our account that, along with historicizing, Sen seeks to transcend Kant's position.

Hegel's critique of Kantian ethics is well known and has become a popular topic for discussion. The only thing we want to advance here is to make a brief overview of this critique. Kantian ethics, Hegel claims, is *formal* – that is, void of concrete historical content. Indeed, the most well known version of Kant's categorical imperative ('act only in accordance with that maxim through which you can at the same time will that it become a universal law', Groundwork of the Metaphysics of Morals; AA 4: 421) is explicitly formal. Hegel, on the contrary, is suspicious of the very business of formulating 'supreme' principles of morality (Stern 2012).

It would be helpful, together with Habermas (1990), to distinguish between the *ethics of duty* that seeks to establish minimal, but genuinely universal normative principles, and the *ethics of good life*, dating back to Aristotle, that attempts to illuminate various aspects of real, historically situated and socially grounded morality. The latter can be roughly qualified as teleological or 'happiness-based', and the former as deontological (Hoy 1989).

It is to the latter that Hegel largely subscribes. He considers the abstract exigencies of Kantian duty as an external norm that aims at discriminating between moral and non-moral actions but which falls short of its own task precisely due to its emptiness.[10] Another important objection, emphasized, for example, by Geiger (2007), is that the very principle of duty abstracting from concrete features of human motivation deprives individuals of *incentives* to do good. These criticisms can be illustrated by the remarks in the *Phenomenology of Spirit* in which Hegel characterizes Kant's approach to morality. It makes sense to provide a lengthy quote:

> [S]ensibility is [...] the negative, whereas [...] the pure thought of duty is the essence from which nothing can be given up, it seems that the unity which is brought forth can only be brought about by the sublation of

> sensibility. However, since sensibility is itself a moment of this [...] *actuality*, then [...] sensibility is supposed to *conform* to morality. [...] [C]onsciousness itself both has to bring about this harmony and to be making constant progress in morality. However, the *culmination* of this progress has to be *put off to infinity*, since if that culmination were actually to arrive on the scene, moral consciousness would be sublated. This is so because *morality* is merely moral *consciousness* as the negative essence for which sensibility is merely of negative significance, that is, is merely *not in conformity with* pure duty. But in that harmony, *morality* as *consciousness* vanishes, that is, its *actuality* vanishes [and] in moral *consciousness*, that is, actuality, its *harmony* vanishes. For that reason, the culmination is not actually to be reached. Instead, it is to be thought of merely as an *absolute task*, which is to say, a task which remains purely and simply a task. [...] [T]he determinate representation of this progress should be of no interest and ought not to be sought because it leads to contradictions – contradictions lying in a task which is both to remain a task and which is yet to be fulfilled, and in a morality which is not any more supposed to be consciousness and not any more supposed to be actual.
>
> (PS: 603)

For Hegel, therefore, Kantian duty remains an unsatisfactory moral conception since actual consciousness is *per definitionem* imperfect. Were the perfect duty to be realized, consciousness as such would become redundant. That is why Hegel thinks that the Kantian ideal, like Sen's perfect benchmark of justice, should remain *infeasible* and as such an 'absolute task' that, however, still asserts itself as a task. It is also too abstract (in a 'bad' sense, namely partial and thus inferior; see Hegel's pamphlet *Who thinks abstractly?*) and void of any grounding, be it in sensibility (and here Hegel could have meant Smith as well) or social milieu. A similar critique (again, for lacking reference to concrete and collectively structured forms of life) is directed against social contract theories that assume atomized individuals acting in an institution-free space. What Hegel calls for is a synthesis of inclinations and duties that does not reject sensibility, emotions, desires and needs, but integrates them, along the lines of the continuity principle, in various higher forms of collective being-together.

Hegel's dissatisfaction with Kant also has pragmatic aspects: strict requirements of duty do not help in ruling out possible conflicts and contradictions of various legitimating principles. Moreover, they can hardly be adequately understood and followed in the same way by all rational agents since in order to grasp them one needs an interpretive effort and a background context, and of course these will differ across social structures, cultures and generations. Another pragmatic concern refers to the consequences of moral actions. Simply following the right principles is not enough. As we know from the discussion of Hegel's action theory above, the *ex ante* justification does not work for him since the known consequences are, in fact, an intrinsic moment of the action itself. But the

consequences of my actions are also dependent upon the institutional environment and could vary across various contexts.

However, Hegel recognized the importance of Kantian morality, particularly the association of freedom, autonomy and practical reason, claiming to have 'sublated' these ideas in a more overarching system of ethical life where moral principles find concrete realization and are supplemented by various social practices. Kant's utopian 'kingdom of ends' is not an option for him for reasons similar to those discussed in Chapter 1 in the context of methodological individualism. Hegel's starting point is the complex institutional structure of modern society, and the abstract notion of the rational/autonomous individual is derived from this conception. That is why in his early 'Natural Law' (1802) essay he rejects the concepts of cosmopolitanism and universal human rights (Hoy 1989). Instead, for him it was necessary to establish an interconnection of various duties without singling out an absolute (or the most universal) one (Stern 2012).

Now, as we see, a lot of Sen's critical points against 'transcendental institutionalism' have already been anticipated by the Hegelian critique of Kant. That prompts one to conjecture that Hegel's alternative may be helpful in sketching a programme that would incorporate Sen's critique but also in some ways go beyond his solutions.[11]

Functionings, capabilities as freedoms, and public discourse: a Hegelian perspective

Sen introduces two main elements in order to render his notion of Open Impartiality applicable: democracy and the capability approach. The notion of democracy is further specified in terms of open public discourse, such as the free press, and less in certain electoral regimes which would manifest contractarian limitations as being membership-based. The capability approach is essential for developing criteria for realization-focused comparisons, which would concentrate on the expansion of individual opportunity sets through institutional change. Both notions are interrelated, as we can say that the actual evaluation of opportunities for different individuals in society happens within public discourse. For example, if public discourse is not open to women, they cannot articulate their views on opportunities, and therefore would possibly not be included in endogenous realization-focused comparisons. Correspondingly, Sen argues that public discourse should be fully open, even including every kind of 'by-stander'. A democratic society would also respect the opinions held by the members of other societies. For instance, European concerns about the death penalty should play a role in US public opinion about this topic.

A threefold notion of freedom

The capability approach is based on the distinction between functionings and capabilities (Sen 1987). Functionings pertain to particular societies and define classes of actions which are necessary to enable a viable individual life; so, for

example, being parents or earning an income is a functioning. Capabilities are the opportunities to realize those functionings. In many contexts, capabilities are also designated as 'freedoms' in the positive sense, i.e. the capacity to realize a certain desired functioning. The idea is that the two notions allow definition of a metric that can be applied in realization-focused comparisons. Thus, if capabilities are enhanced, the pertinent institutional change is desirable.

There are a number of debatable issues here (for surveys, see Clark 2005 and Robeyns 2011). In particular, functionings are relative to particular societies and their social structure. There are, of course, universal functionings, such as adequate nourishment in order to be able to realize any other functionings (here we could locate the link between the capability approach and, for example, Human Development indicators and other attempts, especially by Martha Nussbaum, to list universal capabilities that make up human beings). But many of them depend on certain roles, such as the functioning of being a parent. For example, in various traditional societies becoming a parent is an individual obligation, so that the individual cannot opt out without suffering from social ostracism. Thus, the question of how a really universal list of functionings can be defined, and who defines this ultimate set, remains. Consider a caste society in which an individual might be able to realize the functioning pertinent to his caste, or relative to an imagined state of a caste-free society. This difference will directly affect the evaluation of capabilities: an individual may have the capability to fulfil the lower caste functioning, but cannot achieve higher caste functionings; or, labour conditions for workers might improve substantially, but the permeability of class boundaries might decrease. How can we evaluate these different perspectives for the same individual?[12]

Presenting a definitive list of universal capabilities would thus come close to transcendental institutionalism. However, central to Sen's approach is *public discourse*, which is itself founded upon a particular kind of capability, namely accessing necessary information and freely expressing one's opinion. This capability is shaped by the institutions governing public discourse. It means, however, that *certain institutional changes may involve both dimensions*, and hence make a clear-cut procedure for realization-focused comparisons difficult. For example, there is a range of institutions in modern societies which actually constrain the free flow of information, such as confidential meetings in monetary policy and central bank independence. There are intricate issues of privacy and data control in policing and public security. In short, consistently combining capabilities and public discourse appears to be problematic.

Bildung, or cultural formation, seems to be a relevant bridging concept. It provides intellectual capabilities to engage in public discourse and to be able to process the knowledge necessary for reasoned judgment. In the form of education it is also an aspect of functionings in a particular society. Then, as happened in many societies, certain groups may be denied education because this is perceived to be unnecessary for fulfilment of their functionings, the most widespread case probably being that of girls and women. However, denying education to these groups implies that they lose the capability to engage in public

discourse and to decide which functionings and capabilities are deemed to be most important in their society and which combinations seem to be appropriate. To put it in an extreme way, only the consensus of educated women would be entitled to assert that women do not need access to education.

At this point, Hegel's thought helps to clarify matters. Neuhouser (2000, 2008) suggests a threefold notion of freedom in Hegel's work: personal freedom, moral freedom and social freedom (see Figure 4.1). Personal freedom comes very close to Sen's (2002) conception of rationality, because it is the freedom to determine the ends, and not simply to choose the means. A human being does not simply pursue given ends such as biologically determined desires, as animals do, but is able to choose which desires she might pursue. To paraphrase Smith, human beings are free in imagining any kind of ends they find worthy of pursuit. Our argument is that the analytical indeterminacies in Sen's approach result from the neglect of the two other Hegelian notions of freedom. As depicted in Figure 4.1, this involves three steps; on each level, there is reflexivity of individual action, such as when ends determine the capacity to choose means, or capabilities determine the possibility of moral freedom. *Personal freedom* consists of the autonomous choice of ends; *moral freedom* involves the autonomous decision to adopt and follow certain rules of behaviour; finally, *social freedom* means the completion of individual freedom in the context of particular communities which provide the institutional and material conditions to express personal and moral freedom; this is also captured by Sen's concept of 'capability'.

Smith and Hegel introduce the social dimension when they turn to the simple fact that in collectives of interacting human beings, there are constraints to

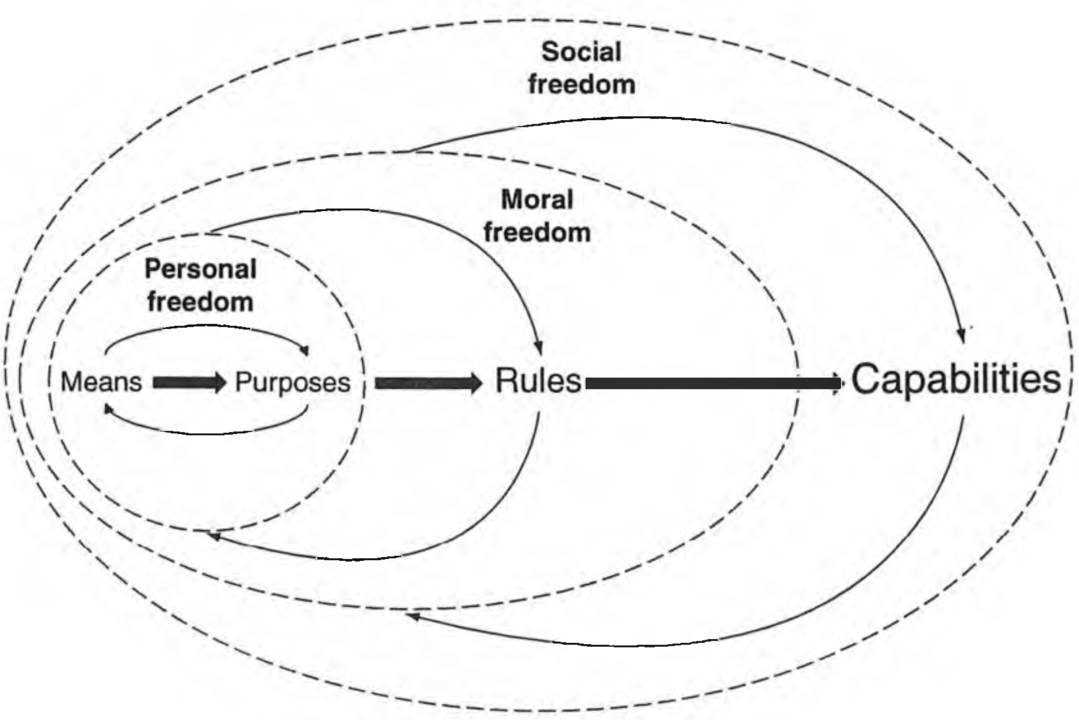

Figure 4.1 Hegelian notions of freedom and Sen's approach.

pursuing one's own ends that are attributable to the activities of others. This is the realm of moral freedom which refers to the principles underlying the choice of ends as well as the resulting coordination of actions which enables the realization of personal freedom. The individual is morally free if she recognizes those principles as being autonomously chosen by herself. This is derived from Kantian morality. However, contra Kant, both Smith and Hegel situate moral freedom in sociality. Smith emphasizes the human drive for praiseworthiness: having freely chosen certain ends which I deem worthy of pursuit, I am only happy with this if these ends are also praised by the others, and are eventually good from the viewpoint of the Impartial Spectator. Or, to put in the way suggested by Hegel, my personal freedom needs to be recognized by others, and they, in turn, need my recognition. The process of recognition gives rise to moral freedom.

The proper site of recognition is public discourse, which establishes the rationality of moral freedom based upon the presentation of reasons for the various aims that individuals pursue (the role of reasons is a distinct problem in welfare approaches to ethics; see Hausman and McPherson 1996: 98). This can result in a state in which the moral rules are agreed upon rationally, and everybody is free under these rules, as they mediate the recognition of one's personal freedom.

In Moyar's (2008) account, if an individual is unable to give reasons for any actions or arguments that cannot be recognized by others, this leads to alienation. In the context of public discourse the question is whether the different speakers can and do mutually recognize their reasons. For the analysis of institutions, this implies the transition to collective intentionality. This helps to transform Smith's notion of the 'Impartial Spectator' into a category that can be applied in concrete historical circumstances. This works within the process of giving reasons for certain actions or opinions.

If there is a society where all men are required to grow long beards, the only reason that can justify this is the convention of growing long beards. This reason will never be recognized by a member of a society where all men are required to be shaved, and it cannot actually be recognized on purely logical grounds, as both conventions are lacking any further motivation other than being conventions. So, purely conventional reasons manifest limited universability. This is different from reasons such as wearing a coat to keep warm in winter; even if somebody does not follow this practice, she can recognize this reason. It means that purely conventional reasons can lead to alienated states and a lack of recognition from others, if there are individuals who reject a convention for arbitrary reasons, just as the conventions themselves are arbitrary. On the other hand, purely conventional reasons may be recognized by the principle of freedom: if the growing of long beards does not affect others, why should they withdraw recognition? Recognition would be simply based on a 'reason free' acceptance of the choices of others.

At this point we see the normative relevance of the *externalities* we dealt with in Chapter 3 (see also Akerlof and Kranton 2000). In the common discussion of

personal freedom, the focus is mostly individualistic: the question is how far the realization of personal freedom constrains the personal freedom of another individual. The notion of externalities borrowed from economics introduces the additional idea that there can be actions between individuals which cause constraints of personal freedom on other non-participant individuals without directly affecting their material situation, but rather the *identities* of actors. These issues are pertinent to the problem of reconciliation between local and universal values. Since values are constitutive of identities, in human action such externalities are pervasive while lacking sufficient reason.[13]

If an action does not affect others, there is no rational reason why those others should deny recognition. If there are externalities, there is the need to discuss reasons why the action should or should not be recognized by others. If the individuals wish to overcome these limits to recognition, they may present reasons that can be recognized, or change their behaviour so that recognizable reasons can be offered. In the first case, they establish their personal and moral freedom; in the second case, they change the ends they pursue and thus change themselves.

Thus, moral freedom includes a process that leads towards the mutual recognition of the diversity of identities in a plural society (compare Sen 2007). What follows from Hegelian political philosophy is a particular perspective on what is today referred to as 'deliberation' (Elster 1998). Note that the capability to partake in public life is a more fundamental precondition for any kind of societal recognition or refusal of recognition for particular kinds of externalities.

A decisive contribution from Hegel was the elaboration of a particular *institutional structure* fostering the realization of freedom. His version involves a picture of civil society consisting of *associations* in which the agents recognize their own individual autonomy, their purpose in life (in Moyar's 2008 conception) and, we would add, their identities. But how far can a given structure of groups be justified in terms of the realization of freedom? Historically the struggle for freedom never was a struggle for 'individual' freedom, but was mostly laid out in terms of rights for particular groups in society, such as the Third Estate, slaves, women or homosexuals. We thus argue that the transition from moral freedom to social freedom hinges on the associational structure of society which provides the institutional setting in which externalities affecting the identities of actors are regulated.

The actualization of freedom in the associational structure of society

Hegel argues that moral freedom remains incomplete, because it refers to some abstract principles, without identifying the resources necessary to realize moral obligations. For example, one might recognize the right of all women to participate in public discourse, but social conditions such as a lack of access to education or the multiple tasks of women within the family might actually limit the opportunities to realize this right. In Sen's terms, women may lack the *capabilities* for realizing their freedom.

Social freedom is actualized and embodied in the institutions of ethical life, which Hegel specifies as family, civil society and the state. These institutions provide action opportunities or, in more general terms, 'rights' – not only formal rights but also materially warranted. This is most evident in Hegel's notion of 'labour', as scrutinized in Chapter 1: poverty cannot be sufficiently overcome just by providing the material conditions of life, because that would not materialize the *right to work* which is essential for gaining recognition in civil society. Therefore, freedom presupposes the material conditions for employment. Social institutions thus realize morally bound personal freedom. Simply providing welfare support or aid does not create the necessary conditions for freedom, as these do not offer a purpose of life. This is why 'human' rights do not exist independently from the institutions of civil society. By implication, reference to abstract human rights cannot be used to evaluate those institutions, thus again refuting 'transcendental institutionalism'. (Sen's own conceptualization of human rights might themselves suffer from this defect, unless these rights are seen as an evolving category in global public discourse.)

What is the most general reference for social freedom in this context? In the Hegelian view, social freedom refers to the universal good of cooperation in civil society. Hegel envisages a total system of institutions that originates in and is maintained by individual actions, while also manifesting emergent principles irreducible to individual action. This intersubjective universal whole irreducible to its parts is *spirit* or the social life itself, i.e. the comprehensive web of cooperation to which everybody contributes while fulfilling her personal freedom, but also providing similar conditions for others.

The simplest way to make the basic principle of Hegel's reasoning clear at this point is to refer to the family. The family as a social institution defines a certain set of roles, such as the role of a father. This role is fulfilled by a man pursuing his personal freedom, provided that the choice of becoming a father is recognized as a free choice by all other members of society. Fatherhood, however, is defined independently from a particular family, and forms the basis for moral obligations. The morally free individual accepts the obligations of fatherhood as the way to realize his free choice of becoming a father. This status should be based on actual rights and obligations stemming from the social institutions that provide the resources for actually creating and maintaining a family. The family as a social institution and, hence, the individual actualization of the role of a father, are thus universally recognized. The individual adopts the *identity* of a father, and by the recognition of this identity by others and by the social institutions, he is free in recognizing moral obligations and social institutions as expressions of his personal freedom.

This kind of argument also applies for other identities that an individual can adopt, such as identities in civil society, which Hegel attributes to the division of labour, or the identity as a citizen of a state. The economic division of labour is expressed and embodied in the institutionalized practices of associations. However, there is a difference between Smith's market and Hegel's system of ethical life, and it is this difference that turns out to be important to remedy deficits in Sen's argument.

Smith also considers 'associations', but mainly sees them in a negative light. In fact, he can be considered as an originator of the long tradition in modern political economy that deals with associations in terms of interest groups and thus extrapolates the self-interest notion on the collective level. In contrast, in Hegel's view associations provide the foundation of shared *identities* ('we-modes') and complement individual identity with a purpose of life derived from the division of labour (see the analysis of identity in Chapter 3). For Hegel, individuals realize the transformation into genuine autonomous individuals in this associational context, and this enables them to also express themselves as citizens of the state:

> [I]n providing for himself, the individual ... in civil society is also acting for others. But this unconscious necessity is not enough; only in the corporation does it become a knowing and thinking [part of] ethical life.
>
> (PR: 273)

Associations are both an organizing principle of civil society and the framework in which mutual recognition takes place. Therefore, associations are not simply interest groups, but play a central role in establishing the identities which, after all, involve the interests.[14]

Do these concepts make sense for clarifying Sen's idea of capabilities and functionings? In the Hegelian sense, associations embody classes of functionings in the civil society. Functionings are not merely functions in relationship with the social system; they also provide the basis for individual purposes of life and for expressing individual identities. For example, a doctor also considers her profession (fulfilling the social function of providing health care services) as a purpose of life, if she pursues this profession by free choice. Hence, for her this is an essential functioning which also requires education or, more generally, a process of formation as a person.

Hegel captured these phenomena in his notion of *Bildung*, which mediates personal and moral freedom, serving as a grounding force for the system of institutions while also being maintained by this system. It involves

> the self-perpetuating need and *habit of being occupied* in one way or another, in the *limitation of one's activity* to suit both the nature of the material in question and, in particular, the arbitrary will of others, and in a habit, acquired through this discipline, of *objective* activity and *universally applicable* skills.
>
> (PR: 232)

Bildung is thus more than just the acquisition of skills; it includes the formation of a personal identity, both through the individual process of learning and by matching between individual ends and the requirements of fulfilling the function, i.e. the knowledge and habitus of doctors.

Functionings share the same property as language or money: a functioning not recognized by others cannot fulfil its task. If I want to be a doctor, I have to

comply with certain generic criteria of being a doctor by free choice. I accept these because they are the only way in which I can express my desire to be a doctor, and by which I can gain recognition. I do not have the personal freedom to decide on my own which criteria count in being recognized as a doctor, although I may try to do it. For example, in the free markets of the civil society there is the possibility that my clients recognize my capabilities, but my peers deny recognition. So, if I want to gain full recognition, I need to enter the public discourse within the context of my peers (i.e. the pertinent associations) and to present reasons why my capabilities would deserve full recognition. If I succeed in convincing my peers, my personal and moral freedoms are realized within the social institutions of the medical profession.

This approach resolves the difficulties with Sen's indeterminacy about the listing of functionings and capabilities. For Sen, this list of functionings is generated in the medium of public discourse. We can now argue that this public discourse is structured by the associational structures in a given society, and this defines its belonging to a particular historical context. Free choice of functionings mainly materializes in the free access to *Bildung*, and in avoiding the possible denials of such opportunities. This human right cannot be posited in an abstract way, because *Bildung* is bound to particular social institutions which define the resulting functionings. In the case of the medical profession, freedom does not reside in freely choosing that profession directly, but in being free to choose the track of *Bildung* leading to the capabilities that are necessary to fulfil the functioning of being a professional doctor.

This view also helps to clarify the relationship between the notion of democracy and public discourse. Democracy, in light of the previous arguments, means to achieve maximum inclusiveness of the processes of *Bildung* that open access to the positions of political power. For example, 'limited access orders' in the sense of North *et al.* (2009) can be defined in terms of limited access to those formative processes, such as in aristocratic systems or in systems of strong incumbent elite control of political careers. This definition is independent from the formal feature of electoral regimes: there are many countries with free elections where the career of a politician is nevertheless limited to narrow social elites. 'Welfare capitalism' (Rawls 2001) is not necessarily a free society because comprehensive social security may go hand in hand with limited access to elite positions of power.[15]

Building on this general foundation, associations obtain a pivotal role in transforming moral freedom into social freedom. In spite of the fact that every doctor pursues her individual aim in realizing her personal freedom, she still acts as a representative of the general class of actions that is recognized in society as 'being a doctor'. This includes the possibility that there is a contentious public discourse about what that means, such as in debates over applying non-standard methods of healing. There is a wide range of 'tokens' of doctors that are still being recognized as representatives of the types, and there are variants which clearly fall outside of the scope.[16] At the same time, doctors recognize each other as doctors in the context of the associations which materialize the 'we-mode' of

being a doctor. In practical terms, society recognizes doctors as valuable members of society, and doctors establish the criteria by which they mutually recognize each other. In spite of great hostility over different assumptions about proper therapies, they would still assume that they share the same interest in finding the most successful therapies and in acting responsibly in this regard. Similarly, in spite of the great asymmetry of knowledge between doctors and patients, the two sides of the relationship would need to rely on mutual recognition, such that, for example, doctors would recognize that they need recognition from patients as being doctors in order to establish a responsible relationship with them.

If somebody claims to be a doctor, this causes identity externalities on other doctors. A medical association internalizes these externalities in providing labels, professional standards or educational services, and it provides an audience of peers which is the forum for public discourse on identities. However, this association cannot internalize externalities that are caused by the collectives of doctors on other people. These collective-level externalities create forces for changing and adapting the associational structure of society. This more general role is performed by the government.

Indeed, one building block is still missing here, and that is *the role of the state*. In a society where freedom is realized, individuals can choose the associations to which they belong, but they cannot choose the state of which they are citizens. Another important feature of the state that precludes us from seeing it as just another 'big' association is that the state has the monopoly of violence.

Hegel is often criticized as being apologetic towards the strong state, but these critics mostly overlook the fact that modern democratic states are much more powerful than even the Prussian state of Hegel's times. As has been emphasized by writers as different as Foucault, Elias and de Jouvenel, the modern state represents a historically unprecedented concentration of power, endowed with a universal capacity to interfere in the most private aspects of individual life. As before, the Hegelian challenge remains relevant: to constrain the uses of absolute power by the rule of law and by drawing on the mediating force of associations.

Only the state can provide the institutional framework for non-violent public discourse among different groups in society, and only the state can represent the most general form of public good, namely cooperation under the rule of law. Some obvious limitations notwithstanding (for example, most individuals are constrained in their access to political office by the requirement to belong to a political party which provides them with the resources necessary to obtain this opportunity; this limits their own opportunities for unconstrained public discourse because they might be obliged to follow partisan ideologies), generally speaking, the state itself must provide open access to positions of power for all its citizens.

The state should receive its guidance from the public sphere insofar as it can trigger institutional change affecting externalities that are identified by public discourse. In our perspective the role of the state is far different from the

widespread Hegel caricatures, and instead comes close to the notion of political liberalism exposed by Rawls in his later work.[17] The Hegelian perspective implies, however, that only the state can provide the ultimate anchor for institutional change, and only it can finally implement institutional reforms that do not happen through endogenous change of the associational structure.

We will come back to this point in the final section of this chapter. However, before doing that we need to consider in detail the role of enterprises, firms and corporations in the perspective on ethics and economics developed so far.

The associational nature of the modern corporation

The firm in its modern incarnation did not exist in Hegel's time, even though the general model for a legal person was already available. In this section, we will show that the modern corporation is another form of Hegelian association.

Let us start by observing that the modern corporation has an ambiguous status in a free society. Individuals are free to join a corporation, but it means that they give up their rights to self-determination in the range of activities subject to the labour contract. A corporation is a strictly hierarchical organization involving, among other things, constraints upon the free use of information by employees. On the other hand, one might argue that organizational closure is necessary to maintain borderlines between 'the economy' and 'the polity', as well as in the sense of protecting corporations from the intrusion of political forces (for a survey of these debates in the management sciences incited by Popper's notion of the 'open society', see Armbrüster 2005).

How far and in which ways can one regard the corporation as an institution of ethical life that provides the conditions for social freedom? This aspect comes to the fore when we approach the corporation as an embodiment of cooperative forces (for a comprehensive approach, see Holz 2012).

In the standard model, the notion of cooperation would only concern the owners who pool resources to set up the corporation, whereas the employees become members of the corporation by entering into a wage contract and thereby relinquishing certain rights of control over their own labour to the owners of the company. Typically, this theory builds on the individual rational choice model and would explain patterns of cooperation in the firm only as a response to the establishment of certain incentive systems by the owners. There is no reference whatsoever to an ethical commitment to cooperation on both sides of the firm. This is the world of opportunism and shirking portrayed by Oliver Williamson.

This market-based view focuses on the dimension of personal freedom in the employment relationship. However, there may be another point of view that involves the analysis of moral and social freedom. We may consider the corporation as a cooperative venture between its members, which would therefore put owners and employees on the same footing. The standard economic model retains the classic portrayal of alienation: the products of work belong to the owners of the firms, and there is no special commitment of workers to the goals of the corporation as determined by the owners. Hence, the corporation does not

represent a purpose of life freely chosen by the workers. The Hegelian picture, in contrast, would see the workers as members of a corporation who autonomously agree with the goals of the firm and consciously engage in the production process.

In the current situation, in view of the ever-increasing technological complexity of the division of labour, the individual working contribution mostly does not represent an individual purpose in life, comparable to a final product. However, this connection can be established if this contribution represents voluntary participation in a cooperative venture in which the individual is a fully recognized member enhancing her human capital (Aoki 2010). As with Hegel's associations, corporations may be considered as vehicles of individual *Bildung*. The structure of corporate governance has to match with the 'cognitive division of labour' in the corporation.[18]

Conceiving the corporation as cooperation has far-reaching implications for determining its institutional framework. In the standard capital-market-based model of the firm, only owners matter in this regard. This view culminated in the global diffusion of the shareholder value approach in previous decades. In this perspective, efficiency and equity are guaranteed if the institutional framework protects and enforces individual property rights of owners. In the alternative view, the cooperative nature of the corporation would require a different institutional framework in which the conditions for cooperation are maintained. Hence, decision-making about the goals of a corporation would also have to include non-owners (this does not imply the model of the worker-managed firm, only under the special circumstance that the workers are actually also the owners, i.e. capitalists).

A corporation is thus not merely a 'nexus of contracts'; it is a concrete expression of ethical life as a particular model of cooperation based on ethical principles. 'Corporate social responsibility' is not just a supplement to the managerial practices of corporations – the corporation is an ethical phenomenon *sui generis*. In particular, this implies that ethical commitments are a defining feature of the corporation – it should be a central actor in public discourse and assume the role of a 'corporate citizen' and an active agent of public policy.[19] The corporation cannot artificially separate its domain from public discourse and it often provides the setting for internalization of externalities.

In sum, the corporation appears to be a key associational form in modern society. Unlike the existing contractual theories that focus on the issues of efficiency and governance in the face of individual opportunism, the Hegelian perspective emphasizes the cooperative nature of the corporation, paying attention to the role of human capital and skill formation.[20] This qualifies the corporation as a structure of distributed cognition, if one considers its role in creating conditions for productivity and innovation.

Realization-focused comparisons and global public discourse

Let us now look in more detail at the issues of institutional change, with the assumption that its aim would be the enhancement of freedom (in its threefold

structure, as outlined above). This primarily means the analysis of the effects of institutional change on the capabilities of individuals. Of course, this analysis can be carried out by a non-member of society, but it is essential that this happens within the group of those who perceive themselves as being affected by the institutional change. This implies that this group is not identical to the political body as such, because there can be externalities which transcend the borders of the political body. In public discourse, the reasons provided for or against an institutional change need to be grounded in arguments that refer to the effects upon the capabilities of the individuals.

The notion of freedom that we adopt is not the same as the standard use in economics, which would just look at the enhancement of personal freedom. (Personal freedom is an important criterion in the sense of a necessary condition, but it is not sufficient.) The first step of our analysis is that institutional change is considered positive if it enhances the autonomy of individuals in choosing their goals of action. However, this must also be embedded into an enhancement of moral freedom that results from the mutual recognition of the principles expressed in the enhancement of personal freedom.

It seems appropriate to discuss this with reference to an example of a problem which currently arouses public debate and also concerns the issues of identity: should societies allow the legalization of gay marriage?

This sort of institutional change increases personal freedom and capabilities: homosexual individuals receive the right to establish families, with all of the resultant legal consequences. But why is this issue so controversial in most modern societies? The problem many people have with gay marriage is that they feel that their own gender identity is affected. This is an externality in the Akerlof and Kranton (2000) sense. Therefore, the question arises of whether this institutional change actually changes the fundamental patterns of mutual recognition in society. Merely changing the institutions does not suffice to create mutual recognition since the identities of other individuals should also be respected. What we observe is a struggle for recognition.

Debates over gay marriage are predominantly couched in terms of enabling access to the traditional form of family to homosexual couples. There is no idea about expanding the notion of marriage to, say, groups of two males and three females, even though the same argument holds, namely that this pattern of behaviour does not negatively affect the personal freedom of others to opt for other forms of family. In other words, in the struggle for the recognition of gay marriage, certain social conceptualizations of the institution of the family are not questioned. What matters is the increasing inclusiveness of the existing institution, but not the institution as such, even though recognition of gay marriage would also entail a substantial change of this institution.[21]

There are various arguments in the public discourse about gay marriage. One kind of them refers to the religious or traditional understanding of the family institution. These arguments are purely conventional. Therefore, shifting perceptions and moods in public opinion matters much in determining the eventual outcome of the struggle for recognition. As is best illustrated in the American

'culture wars', this sort of battle might never be resolved, as conventions simply oppose conventions, without any reasoning that can be universally recognized. The other class of argument concerns functions of the family against the background of certain biological, psychological or sociological knowledge. These arguments mostly refer to the child-rearing function of the family. In this debate one might argue that even the biological function of child-bearing can be modified by means of modern technology, and the alleged psychobiological function that requires different gender roles in child rearing (i.e. 'fathering' and 'mothering') could be performed by homosexual couples if they assume and distribute those roles among the partners. Again, public discourse would remain within certain boundaries of the 'family' concept, such as it being constituted by a 'mother' and a 'father'. Universal recognition of homosexual marriage could be based on moving to a more abstract conceptualization of the family functions, such as 'parenting'. All manifestations of families that can prove in public discourse that they realize this function of 'parenting', independently from biological sex, could be recognized.

This kind of reasoning would be non-conventional and thus cannot get stuck in the opposition of different conventions, but at the same time could build on existing shared conceptions of the family in terms of its functionings. Enhancing the capabilities of individuals to create families would mean that biological sex would no longer be an obstacle to realizing this option of personal freedom, but would still imply that the new forms of families would have to meet certain universally recognized conceptualizations of functionings, such as parenting or lifelong mutual care and responsibility. In other words, the conservative view of the family would be reconciled with the progressivist view on freedom of sexual orientation in achieving a sex-independent definition of traditional family roles.

This example shows that 'transcendental institutionalism' cannot provide a universal standard for the notion of 'freedom' with reference to individuals' choices in establishing and maintaining 'families', because we cannot identify a 'transcendental' form of family which real-world conditions might approach through time in terms of increasing freedom of choice. We can only assess enhancements of freedom in terms of 'realization-focused comparisons' – that is, relative to real-world social institutions of families.

This would also imply that it is impossible to substantiate the notion of the 'family' independently of the particular realizations in particular societies. Otherwise, as we have argued, the concept of 'family' will lose any meaning. So, if in non-discriminatory public discourse the LGBT community would not provide sufficient reasons why homosexual families should be recognized by society, this has to be accepted as an outcome that realizes freedom in society.

However, this argument still overlooks the role of 'by-standers'. If we consider different societies in different countries, can public opinion in one country be relevant to public opinion in another country? This depends upon the question of how far cross-national externalities apply. Do legal restrictions on gay marriage in one country create externalities on gay and conservative identities in other countries?

The problem with that question is that it seems to suggest a similar void as with the previous attempt at suggesting an abstract concept of family. But in order to find a genuine universality we have to consider the role of associations in the context of organizing *global* public discourse. Whether the outcome of public discourse in particular countries affects the identities of people in other countries needs to be established in the context of public discourse in the *global associations*. For example, with reference to gay marriage a pertinent setting is the churches, insofar as they are organized as global associations. One can also envisage a global discourse over gay marriage that takes place between different global associations for gay rights, conservative groups and so forth. This allows the identification of a basic condition of freedom for public discourse: access to global discourses should not be curtailed by national measures. This refers to flows of information, but possibly also to the domestic activities of global associations in the local branches.

As a result, we get a picture of a free global public discourse giving the floor to the by-standing observers. Thus, for realization-focused comparisons the additional condition of the gradual emergence and evolution of a global associational structure is important that runs orthogonal to the political boundaries of communities and which allows for the formation and expression of multiple identities which are independent from these communities, as envisaged by Sen (2007). Again, the Hegelian view can give further support to and clarification of Sen's approach.

To this we can add a few thoughts on the role of corporations in the global economy. Modern corporations operate on a global scale and carry their corporate structures, values and cultures from their home country to other countries, thus providing a laboratory where 'cross-cultural management' serves to harmonize divergent value systems. This role of corporations is similar to the role of professional associations in establishing global standards of professional behaviour. In particular, the activities of corporations build bridges between national public discourses. For example, labour standards in specific countries may be the subject of national public discourses, but customers in different countries may be concerned about the conditions in those countries. Global corporations have to consider feedback and take account of the effects of national public discourses, thus revealing their ethical nature in relation to the surrounding societies. Corporations always need to decide how to reconcile and arrange relationships between value systems in their home countries and those which prevail in the host countries. Even in the case of a loosely decentralized structure, such as holdings, the question of how to define the shared values of corporate culture remains. This requires ethical reflection and decisions.

Let us take stock. Our main concern was to further clarify Sen's notion of 'realization-focused comparisons' in evaluating institutions and to show that this is Hegelian in essence. We referred to the idea that all institutions are performative, which implies that there is no external standpoint from which we can evaluate them. This is why Sen's proposition is adequate if one sets out to identify advancements of institutions towards some general good. However, Sen

does not provide sufficient detail about the institutional structures that enable realization-focused comparisons. We argue that this detail can be provided by reference to structures of recognition in Hegel's threefold notion of freedom.

A genuine Hegelian lesson here seems to be that the idea of *universality* in moral reflection has to undergo profound changes. Abstract universals such as concepts of 'human nature', 'perfect duty', or, for that matter, 'perfect institutions' should be replaced by a 'true' concrete universality gained from institutional embeddedness, universality which evolves over time, and as the result of a historical development.

For practical matters, this means that realization-focused comparisons are reflected in changes to the associational structure of society and in public discourse that guides actions of the state. Institutional advancements happen if these structures enhance the capabilities of individuals in the sense of Sen. Connecting with pertinent topics in economics, we could also argue that 'social freedom' is actually reflected in the growth of social capital, which can be measured in the complexity and accessibility of associations to which individuals can voluntarily accede.[22] Beyond these aggregate observations, we cannot evaluate particular institutional changes independently of the public discourse. However, it is essential to realize that this public discourse is global, because of the reach and scope of externalities. We argue that corporations are major participants in this process since their activities increasingly link national public discourses into one integrated network. Corporations and other groups, such as professional associations, become the agents, vehicles and embodiments of normative universality. In the notion of public discourse we can rediscover the concept of *public representations*, as dealt with above in the context of the Aoki model and its extensions. In pursuing and embodying universal goals, corporations should refer to the realm of the media, making visible the ideas they aim to defend and helping them to become actualized and find intersubjective acceptance.

One final remark is in order. In this chapter we often referred to the critique of 'transcendental institutionalism' and related normative ideas, such as early Rawlsian theory of justice. Every normativity, as we demonstrated along the lines proposed by Sen, should be endogenous and thus supported by the institutional framework, otherwise it turns empty and impractical. Now, every normativity is *sensu stricto* endogenous since every normative concern is brought about by a society and expressed in the language that everyone (hopefully) understands. The merit of Hegel was to indicate the institutional embeddedness and historicity of normative concerns. Hegel demonstrated how such normative claims emerge and which developmental process leads to the increasing social connectivity of seemingly independent agents and discourses.

Notes

1 In contemporary political economy there are few receptions of Hegel which pay attention to his original thoughts. One source is Fukuyama (1992), mostly cited with reference to the 'end of history' after the collapse of socialism in Eastern Europe. But Fukuyama's essential contribution is often overlooked. In fact, what he suggested was

an alternative Hegelian approach to liberalism. In this chapter, we partly pick up Fukuyama's ideas in highlighting his juxtaposition of two different conceptions of a liberal society. One is the notion that dominates moral philosophy as related to economics so far, and which is most clearly expressed in contractarian approaches. They make theoretical regimes of consent between free and autonomous individuals an ultimate reference in the moral evaluations of institutions. This amounts to introducing a conceptual framework, such as the Rawlsian veil of ignorance, in which individuals can be considered independently from the existing institutions – that is, in an institutional void, often interpreted as an original state of freedom and autonomy. Institutions on which free and autonomous individuals can agree without coercion, at least hypothetically, are then regarded to be the 'just' or 'best' institutions. Once these institutions are identified, these theoretical constructs can be used as a *benchmark* to assess existing institutions in real-world and actual historical contexts. Fukuyama argues that the Hegelian approach is entirely different because it does not posit a hypothetical scenario of original liberty, but argues that freedom is the *outcome* of institutional evolution: it is a process of spirit and is dynamically identified with history. In this particular sense, he can speak of an 'end of history' in a similar fashion as Hegel, who believed that German philosophy, the emerging European Law and the constitutional monarchies represented a climax of human history in realizing a free and reasonable political and social order. The 'end of history' in this context means that the history of ideational inventions, aimed at identifying the conditions for a free and just political order, has come to an end. Fukuyama confronts the contractarian views with a succinct Hegelian definition of a free society based upon the notion of recognition, which Fukuyama specifies as the *rational, reciprocal and equal recognition of each other's dignity as a person* (Fukuyama 1992: 200). This state can only be achieved after a struggle for recognition, which he sees as having occurred in the East European revolutions (and which could certainly also be seen as happening in the recent Arab Springs, for example). In other words, Fukuyama's Hegelian notion of the free society is close to the modern idea of 'inclusiveness' of societies on the basis of individual equality. This state can only be achieved once certain institutions are established which embody this principle of rational recognition, and hence cannot be conceived as a hypothetical 'original state' of individual freedom.

2 The concept of performativity should not be confused with simple cultural determinism, such as in cross-cultural research on values of the Hofstede tradition (Hofstede *et al.* 2010). In the context of experimental psychology, our approach comes closer to Yamagishi's (2012) 'niche construction' concept of culture. This approach is based on game theory and conceives of individuals as 'cultural game players' who continuously construct and process information about their social context and the resulting perceptions of incentives for actions and their expected pay-offs. Yamagishi contrasts this view with the 'cultural self-construal approach' in psychology which, similar to many approaches in economics and the social sciences, treats culture as a set of properties of individuals which they share with other individuals in a population. These approaches would consider the cultural values as exogenous determinants of social interaction. On the contrary, the niche construction approach would assume that individuals continuously process cues about different frames for social interaction in order to construct shared perceptions which then guide their strategic interactions. Interestingly, Yamagishi builds on his pioneering work on the provision of social punishments in public goods games (Yamagishi 1986), which is also the setting for the experiment by Vollan *et al.* (2013). Yamagishi shows that standard distinctions between East Asian 'collectivism' and American 'individualism' fail to recognize that 'collectivism' depends upon the perception of a workable system of social sanctions. Therefore, in his experiments, Japanese participants under certain conditions appeared to be less 'collectivistic' than their American counterparts. This result corresponds to a long series of similar experimental violations of behavioural assumptions derived

from the 'collectivism' hypothesis, in spite of the fact that it seems to have been vindicated in most survey research on cultural values. For example, in a game about teamwork reported by Yamagishi, Japanese participants were even willing to accept pay-off reductions if they were given the opportunity to leave a team where no workable sanctions against free-riding existed, thus paying to switch to the individualistic setting, whereas most Americans remained within the group, expressing much stronger confidence in the absence of free-riding in the team, which would be conventionally explained as an expression of collectivist values. Yamagishi (2012) argues that this sort of behaviour is a 'self-fulfilling prophecy' in the sense of Merton (1957). This notion refers to the interaction between institutions, incentives and behaviour in ongoing social interactions. Individuals create 'social niches' by introducing and maintaining certain institutions and the implicated incentives; the incentives define the ways of adapting to these institutions which, in turn, feed back into their ongoing construction.

3 For example, in the economic theory of international trade, basic analytical principles (such as comparative advantage) imply that unilateral trade liberalization is the best policy for small countries, with size defined as the relative share of world trade (Bhagwati 2002). In this judgment, consumer welfare is taken as the benchmark. So, the best institutional regime is identified by purely theoretical arguments. Then, we can compare existing institutions in terms of their distance from the free trade regime. For example, in the simplest scenario, one would compare tariff levels across the board and compare countries in terms of their 'trade restrictiveness'. This thinking shaped post-WWII trade policies and is nicely reflected in policy assessments that show how declining levels of tariffs represent linear and monotonous progress towards the 'better' institutional regime (for example, World Trade Report 2007: 207ff.). However, there are two tacit assumptions in such evaluations, namely that this linear progress also entailed improvements for all parties involved, and that the resulting trade patterns were really driven by the changes of the institutions. Regarding the first point, we note that throughout the history of the international trade policy system, there was always considerable disagreement about the 'fairness' of the developments (on the results of the last successful WTO round, see the critical evaluations by mainstream trade economists, e.g. Finger 2000 or Panagariya 2000); regarding the second point, it is very difficult to prove that real situations are caused by the policies adopted (Rose 2004). In real-world voting procedures, national policies often turns protectionist, and international agreements stumble over differences in judging the trade-offs between goals of trade liberalization and environmental protection. Thus, as a matter of fact, the unique optimum is not reflected in real-world preference orderings.

4 To take the example of international trade, again: if the theory of international trade focuses on consumer welfare, this is defined by the external scientific observer in terms of material welfare. The actual consumers are not involved in defining what they perceive as their individual benefit. Realization-focused comparisons, on the contrary, would involve actual consumer opinions about how international trade affects preferences. Thus, as in our case study in Chapter 5, consumers might not agree with the utilization of biotechnology in modifying living organisms, and hence would demand trade barriers against those imports. This demand may stay in conflict with the actual material increases of welfare that might result from free trade in all agricultural products, including genetically modified organisms (GMO). Standard trade theory cannot deal with this issue, but would merely conclude that trade barriers against GMO increase trade restrictiveness. However, in this case this does not happen because producers receive protectionist advantages, but also because consumers express their preferences about the institutions of trade. Therefore, as we will discuss in Chapter 5, realization-focused comparisons often yield different judgments than transcendental institutionalism. It is important to note that the actual practices of international trade policy negotiations do exactly this: they aim at achieving a shared

view on institutional changes among all parties affected, and they implement what is perceived as 'progress' by all of them, relative to the status quo (Moore 2003: 101ff., 135f.). Reference to the ideal-typical state of free trade does not matter much, apart from the mainstream analyses of trade policy. In other words, the theory is part of the public reasoning about international trade, but it does not explain what happens in the actual trade policy process.

5 Again, trade policy is a good example: as Fernandez and Rodrik (1991) argued in a seminal paper, even if the optimal sequence of institutional changes were known, the actual outcomes relative to the current context are uncertain, whereas the costs are known with certainty by the affected parties; therefore, institutional change is blocked. However, this situation can always be interpreted in such a way that the total costs of institutional change under uncertainty outweigh the benefits, even if the benefits of the final states clearly dominate the benefits of the status quo. This paradox is well known in trade theory and relates to the inclusion of political transaction costs into the theory of trade: once all costs of institutional change are included in the analysis, it is no longer feasible to uniquely identify free trade as the optimal regime in the real world. We end up in a paradox, namely that all realized institutions might be considered as the 'optimal ones', thus fatally undermining the position of the external observer arguing from the Nirwana of 'transcendental institutionalism'. We discuss these issues further in Chapter 5.

6 Hegel discusses the entire oeuvre of Smith only once in the *Lectures on the History of Philosophy* (part III, section 2, chapter 2B) (there is another mentioning of the name, together with Say and Ricardo, without reference to specific ideas, in § 189 of the *Philosophy of Right*). He puts Smith in the context of Scottish philosophy, which he praises in terms of being a reasonable practical philosophy of morality and government, but disqualifies with regard to 'speculation'. Hegel particularly mentions the concept of sympathy, which clearly reveals his knowledge of the TMS. In fact, we know that during his Berne times (1793–1796) Hegel read Smith and was concerned with Kant's theory of morality, based on the aim to render Kant's approach practical and develop an account of civil society (Pinkard 2008b). Yet, the only clear evidence for Hegel dealing with Smith is to be found in the Jena manuscripts (for a detailed assessment, see Neschen 2008: 64ff.). For earlier periods, Steuart and his interventionist view of the state seems to have been predominant, albeit balanced with Hegel's concern for individual freedom. In this early period Hegel mainly saw the economy in a negative light, especially with regard to the phenomena of poverty and excessive drives for wealth accumulation. This view changed during his Jena times, when we also have more compelling evidence for an impact from Smith (Neschen 2008:130ff.). This coincidence also justifies Nuzzo's (2010) and our interpretation that Hegel actually was aware of Smith's economic *and* ethical theories in which the civil society as an ethical phenomenon also plays a central role (see Evensky 2005).

7 It is important to emphasize this difference. Smith's theory of morality is not based on a notion of positive engagement with others, such as Christian doctrines of loving your neighbour. In his use, 'sympathy' refers to what we would now call cognitive empathy (compare Singer and Lamm 2009; Griswold 2006 elaborates on the role of 'imagination' in Smith's thinking), or capacity to imagine the thinking and feelings of others. Smith's sympathy is cognitive in the sense that it involves the capability to analyse the context of others' positions and to understand and imagine the implications for the subjective judgments of another about this situation. 'Sympathy' in this sense also enables malevolent cheating, and thus does not necessarily imply compassion. However, fellow-feeling is a positive emotional attitude towards the presence of others. Therefore, Smith has a complex view that cannot be simply equated with 'empathy' in the emotional sense, i.e. feeling exactly like the other, or harbouring altruistic feelings as a result.

8 It is interesting to see how this concerns the principle of self-interest that Smith seems to highlight in the *Wealth of Nations* (Mehta 2006). Against the background of the TMS, self-interest is only one kind of sentiment that drives human action. However, if we consider markets, self-interest may appear as the only behavioural guideline which could be accepted as a foundation for moral judgments by the Impartial Spectator, because, given the conditions of market competition, only self-interest appears to be a reasonable imagining of other's motivations, thus achieving a universal status. Smith does not treat self-interest as an anthropological universal property of human beings, but as a moral category in markets which is constructed as the basis for proper moral judgment. Famous formulations (such as the remark about the unreliability of the 'benevolence' of the butcher and other people in the market economy) actually tell us that only the assumption of self-interest, given the context, is reasonable in coordinating actions; this also implies that self-interest and sympathy are closely related here, because my interaction with the butcher is guided by my sympathetic reconstruction of his interests. This is a moral judgment inasmuch as I accept the fact that my own action towards the butcher has to respect his self-interest: for example, putting moral pressure on him to lower the price for altruistic reasons would actually be an immoral demand.

9 A full treatment of this issue would require a discussion of the two Hegelian categories of 'morality' and 'ethical life'. Dudley (2008) discusses the fact that the sequence between the two states is reversed in the *Philosophy of Right* as compared to the *Phenomenology*, which had given rise to many debates in Hegel scholarship. However, as Dudley argues, this only reflects the differing analytical perspectives of the two books, which is also important in the current context. In the *Phenomenology*, Hegel discusses the transformations of consciousness, while in the *Philosophy of Right* he focuses on the ontological structures of human action and freedom. In the *Phenomenology* morality appears as a later stage than ethical life in the transformations of consciousness, which represents the emergence of the moral subject in the evolution of European civil society. Here, Hegel regards the Kantian principles of morality as expressions of this intellectual evolution, while simultaneously revealing its limitations (Siep 2000: 206ff.), whereas ethical life (modelled with reference to the Greek community) is interpreted as an underdeveloped state of consciousness because it does not include the autonomous acceptance and mutual recognition of the ethical commitments. In comparison, in the *Philosophy of Right* the chapter on morality includes the analysis of action and marks the transition from a 'person' to a 'subject', meaning that the pure legal categories of persons in the civil society are now expressed in autonomously held moral beliefs and decisions to follow certain ethical rules. Hence, this mainly turns out to be Hegel's theory of action based on expressive rule-following (Schnädelbach 2000: 219ff. – this view also corresponds to the *Phenomenology*, thus showing the continuity of the different perspectives; compare Quante 2011:199ff.). In this context, Hegel's critique of Kant gains relevance in demonstrating that moral freedom cannot be based on a purely transcendental universalistic standpoint (see below). Thus, in the *Philosophy of Right* the analysis of ethical life follows the analysis of morality. These considerations complete the metaphysical foundations for Hegel's analysis of civil society.

10 It is necessary, however, to mention that Kantian ethics cannot be reduced to the empty formula. We have no opportunity to discuss here whether Hegel's critique is correct. Suffice it to say that Kantian ethics may be interpreted in many ways, some of which emphasize the historical and not the purely formal dimension of morality; see, in particular, White (2011) for a recent (and quite knowledgeable) attempt to make use of Kant in relation to economics. But in order to accentuate the main tendency of thought we refer to the Kantian position as a formalist one. Similarly, Rawls, especially with respect to his later writings, may well be interpreted in Hegelian terms. This is exactly what Ege and Igersheim (2008) do when they stress what Hegel inherited from Kant (the idea of moral autonomy and freedom) and what Rawls later inherited from Hegel (the idea of reconciliation of the universal and the particular).

11 The relevance of these philosophical debates for economics is most obvious in Binmore's (2005: Chapter 3) vehement rejection of the Kantian categorical imperative, which he denounces as a Dennettian 'skyhook' – that is, an attempt at grounding analysis in arbitrary determinants standing outside nature and the real world. Instead of Kant, he praises Hume as being the founding father of ethical naturalism, without, however, paying sufficient attention to the construction of ethical norms in Smith's work, and actually denounces the 'Impartial Spectator' as another sort of 'skyhook'. Our perspective reveals Binmore's unavowed Hegelianism in the thesis that culture is grounding empathetic preferences. Binmore seems to concretize Hegel's account of the 'second nature' and ethical life.

12 Another ambiguity within the capability approach concerns references in terms of individuals or collectives. In fact, Sen himself (2009: 246) is indeterminate on whether collective capabilities can be included in the capability notion, such as the capability of a country to defend itself against invaders: what happens if individual capabilities need to be curtailed in order to enhance military strength? There are many lists of fundamental capabilities, but Sen himself is reluctant to underwrite any particular lists because he argues that the lists should be the result of public discourse in society. This also applies for the collective capabilities, which would therefore be based on individual valuations as expressed in public discourse. But even if the list could be made, in specific settings of realization-focused comparisons there is always the problem of weighting schemes: institutional change might lead to improvements in one respect, and to deteriorations in another, so that an aggregation procedure is necessary. But those weighting schemes are themselves contingent upon the particular groups in question.

13 There is an important evolutionary argument for the pervasiveness of arbitrary values and behavioural rules in determining identities, going back to Rappaport (1979) and Munz (1993). If the rule has a function, then it can diffuse by imitation or, in the context of discourse, by giving convincing reasons for this rule. But wearing a coat in winter would not be a viable and sustainable criterion for distinguishing individual and group identities and to separate rather than unite people. Only rules without function can be protected against erosion by functional diffusion (for an empirical case study of functional and ornamental features of Polynesian canoes, see Shennan 2008 and Rogers and Ehrlich 2008). This means that only rules for which no convincing reasons can be provided will maintain identities through time. Hence, the problem of identity externalities is particularly difficult to resolve, since no rational reasons can settle the disputes, as we know from centuries of sad experiences with intergroup conflicts.

14 O'Neill (1997) argues that Hegel's views go beyond the conception of the market as the domain of deceit and delusion, because recognition in associations refers to skills and capabilities, thus offering an independent anchor for assessing the qualities of products and people. Hegel's associations partly reflect the German tradition of artisanal guilds, which provide standards for skills and product qualities, although in principle they differ from them in terms of Hegel's emphasis on open markets and free competition. We would also add the role of associations in offering a framework for individual identities.

15 The seminal contribution of North *et al.* (2009) seems to define 'open access orders' according to mere formal principles which define the notion of 'open access' (see, e.g. p. 114). Interestingly, they interpret the concomitant growth of government as the increasing 'responsiveness' of government to citizens' demands, hence also reflecting inclusiveness (142ff.), and distinguish their view from that of Acemoglu and Robinson (2006) who argue that democratization actually amounts to a reconstitution of elite rule by different means, in particular by redistribution as a means of co-opting non-elites. 'Open access' thus requires not only formal access, but also the creation of its own material conditions for agents to be able to invest time in political activities and to fulfil their political functions as citizens.

16 In recent sociological analyses of organizations (Hsu and Hannan 2005; Hannan *et al.* 2007) their communication with audiences is described with reference to the 'labels'. Labels cannot be manipulated at will because they define default conditions for belonging to a sort of organization. Interaction with different groups in society, such as clients, fund providers or experts, runs through the labels, whereas organizational innovation requires the modification of labels and communicative efforts directed at those audiences. Thus, industries and their sub-segments are defined by labels which guide the mutual expectations of all interacting groups and individuals. This way of thinking is close to the more general analysis advanced here.

17 Indeed, to a large extent Rawls's (2001: 135ff.) conception of a 'property-owning democracy' seems to correspond to the Hegelian civil society that Rawls approvingly refers to. The 'property-owning democracy' is a system in which private ownership of productive assets is not only possible, but widely dispersed throughout the population, so that the concentration of economic power is limited by equal material access to education and the appropriate redistribution of wealth (not income) to provide equality of opportunity. In contrast, income redistribution that leaves the distribution of wealth largely unaffected is the main feature of 'welfare capitalism', which therefore cannot be regarded as a just society. Hegel's criticism of merely redistributive interventions of governments fits into that picture, as far as he favours measures that enable the realization of the right to work. It is also important to note that Rawls (2001: 153ff.) distinguishes between 'political' and 'comprehensive' liberalism, the latter belonging to the Kantian tradition and implying absolute individual freedom under any circumstances, whereas the former protects the autonomy of the 'purposes of life' unless the capabilities of individuals are affected necessary for participating in the body politic. For example, political liberalism is quite tolerant towards different cultural traditions regarding the relationship between males and females in society, and would refrain from criticizing certain expressions of patriarchy. However, a patriarchal order that limits women's access to education would violate principles of political liberalism because this would jeopardize women's capabilities to partake in the political process.

18 Aoki (2010) presents an extensive analysis of what he calls 'associational cognition'. In his approach, there are different degrees of complementarity between the cognitive assets of workers, managers, investors and the physical capital of a corporation. Corporate governance needs to adapt to these patterns of associational cognition. Without using the term, Aoki clearly describes performative structures, insofar as the modes of governance and associational cognition mutually adapt and reinforce each other. That does not simply mean that corporate governance is shaped by culture, as seems evident in Aoki's (1988) classical comparison between the 'A-firm' (the US pattern) and the 'J-Firm' (the Japanese pattern). There can be cultural determinants of cognitive attitudes (compare Nisbett 2003); however, in the context of the corporation it seems more important that the mode of associational cognition also adapts to the corporate governance regime, which is in turn influenced by the institutions of related domains in the economy, in particular labour and capital markets. These elements are interconnected. For example, the standard US model of ownership-based governance is in accord with low asset specificity of workers' human capital and hence high mobility on labour markets, which in turn fosters the high standardization of skills. To conclude, there are no universally preferable, 'most efficient' corporate governance regimes, but those regimes reflect historical contexts and contingencies.

19 Consider the issue of gender discrimination. In modern societies the workplace shapes the everyday lives of the vast majority of citizens. Therefore, general public policy concerns about gender discrimination have to approach this as one of the most important targets when tackling these issues. But gender issues are also the aspect and the product of the cooperative culture in the company. It is not sufficient to set up a legal framework that enforces anti-discrimination in the company. Gender issues

would have to become a shared concern of all members of the corporation who invent and promote certain ways of life and values as the elements of this cooperative organism. For example, companies that offer support schemes for women actually make an essential contribution to changing gender politics in society.

20 Similar concerns are to be found in the so-called competence theories of the firm which play a significant role in strategic management (in economics, see Foss 1993 and Hodgson 1998). Competence theories approach the firm as a production system in which technologies and human agents interact, and human agents operate as *collectives*. In these systems, routines not only solve coordination problems in the contract theory sense, but also solve more complex social conflicts, and, in particular, coordinate knowledge that is distributed across agents and technology (on routines, see the seminal contribution by Nelson and Winter 1982 and the survey by Lazaric 2011). This view fits nicely into our perspective of emphasizing the artefactual nature of firms (D'Adderio 2008, 2011), an externalist approach to organizational rules, and the normative nature of commitments beyond individual opportunism.

21 An alternative approach might be to expand the legal framework to include all conceptualizations of the 'family' that have ever existed in human societies, arguing that all of these reflect the human condition. That would include, for example, both polygamy and polyandry, and many different realizations of the extended family. Even this, however, would unduly restrain personal freedom, because purely arbitrary self-assignments of groups as 'families' would not be possible. One could legitimately argue that freedom cannot be realized in this sort of vastly enhanced definitional scope of the 'family', because the notion would become devoid of any specific meaning. Families would essentially not be distinct from kindergartens or small-scale enterprises. Even though the particular definitional details about families are certainly under dispute, a core definition remains necessary to distinguish this institution of ethical life from others – for example, with regard to the intensity of emotional commitments.

22 Empirical research on social capital on the aggregate level emphasizes the role of associations in the larger sense, following the seminal analyses by Putnam (2000) and, in economics, Knack and Keefer (1997). However, one cannot naively assume that the more associations there are, the larger the stock of social capital, and even more sophisticated approaches suffer from serious methodological flaws (Durlauf 2002). The first reason lies in a distinction already made by Putnam, namely between 'bonding' and 'bridging' kinds of social capital. Another has been emphasized by Coleman (1990) and highlights the positive effects of social capital on cooperation and public goods provision, effected by 'bonding', and the other focuses on the individual accessibility of resources along the lines of Burt (2002), which is the 'bridging' function. 'Bridging' social capital can be seen as a privately appropriable good, whereas 'bonding' is a club good at the very least. 'Bridging' social capital is sometimes referred to as 'Olson' capital on the collective level – that is, interest groups in the general sense (in contrast to 'Putnam' groups). In empirical research these two types need to be distinguished, which can pose serious difficulties for identification (Bjørnskov 2006; Beugelsdijk 2006). These empirical issues can be resolved by moving back to the individual level and asking for the effects of the associational structure on individual freedom, or, in the present context, on capabilities. The crucial role of externalities also comes to the fore if one adopts the network perspective on social capital (Dasgupta 2005). This connects the individual and the collective level, but poses insurmountable difficulties to aggregation, especially because externalities can be both negative and positive. The relationship between groups and social capital always involves in-group/out-group distinctions, and thus, for example, positive effects of in-group trust and rule enforcement and out-group discrimination. To summarize, research on social capital clearly contributes to the further conceptualization of individual capabilities, and this points towards the Hegelian emphasis on the contextuality and historicity of these phenomena.

5 Hegelian economics in a pragmatic mode

Performing the economy

In this chapter, we analyse two case studies that show how the Hegelian perspective on economics can be applied to the issues of economic policy. Can the plethora of concepts and ideas discussed in the previous chapters make a difference when dealing with problems that arouse public concern and which are hardly resolvable with the tools of standard economics? Or, perhaps more radically, are there phenomena performatively brought about by the very application of standard economics in public policy, and which suggest the possibility for the Hegelian perspective to indicate different ways of 'performing the economy'?

Our first case study concerns managerial incentive systems; the second touches upon international trade in biotechnological products. Both topics attract public attention and are subject to public policy debates. In both cases, the discussion centres on the question of whether the actors in certain economic domains should be left free to decide upon their actions. In the case of managerial incentive systems, the public debate following the financial crisis of 2008 demands more penetrating government regulation of managerial remuneration; in the case of biotechnology, the question is whether governments and societal actors should enjoy the freedom to regulate and contain innovation while producing the side effect of creating obstacles to free trade. In both cases, ethical issues seem pertinent: in the former, fairness is often invoked when criticizing perceived excesses in top executive remuneration; in the latter, environmental ethics and consumer sovereignty related to personal values in choosing what to consume are important arguments in the public debate. In both cases, standard economics serves as a central argument to justify and legitimize the autonomy of the economic domain: in the first case, current practices are seen as efficiency-enhancing in the context of solving principal–agent problems in large business organizations with separation of ownership and management; in the second case, emphasis on the role of standards in limiting or enabling free trade follows from the theoretical principle of comparative advantage. As we shall see, the Hegelian view on economics entails alternative perspectives which are pragmatically meaningful and operational. Our style of argument will be different from the theoretical, methodological and abstract reasoning of the previous chapters, as we will give much effort and space to analysing the particular institutional

settings in which the two issues emerge that we aim at bringing to a Hegelian solution. By this approach we wish to show that Hegelian economics has much to say about institutional details and hence the pragmatic design of institutions in real-world economies.

Managerial incentive systems in financial capitalism

The central role of economic theory in the emergence of high-powered managerial incentive schemes is today well reflected in pertinent textbooks on managerial economics (e.g. Brickley *et al.* 2009). At first glance, this leads to the question of whether this is another case of the performativity of economic theory. The original conceptual import of 'performativity' into economics happened in the context of financial markets (MacKenzie 2006, 2007). The mechanism of performativity is straightforward: there is a model generated by economic theory that enables the measurement of an economic magnitude not directly observable – in the original case, the volatility of stock returns which is necessary to develop a method to value stock options. Then, if this solution is made available to market agents they will start to value stock options accordingly; this, under certain conditions, will lead to a convergence between the predictions of the theory and actual behaviour of market agents and actual market performance. Thus, economic theory becomes performative.

The case of managerial incentive systems also suggests performativity of economics. In this case, managerial performance in the sense of identifiable causal chains between managerial action and company performance is difficult to observe directly because of the complexities of multi-tasking and the impossibility of separating individual action consequences from environmental disturbances in a complex market environment. Therefore, economic theory is used to construct a concept that allows for the measurement of performance: this is the idea that the *valuation of the company on the stock market reflects all of the available information about company performance*, including the performance of its top management, which is responsible for strategic decisions and all important decisions on investment. Installing a feedback loop via stock options allows the mobilization of all hidden private information of top-level management about the causal links between own performance and company performance: in other words, the owners would not need to obtain all of the information necessary if they wanted to design direct performance measurement – top-level management will adopt strategies that aim at the maximization of the company's value, thus simultaneously pursuing own aims and the aims of the owners. Direct governance by boards and incentive schemes of the kind described are thus partial substitutes (which can be empirically confirmed; see Cohen *et al.* forthcoming).

In this construct, economic theory becomes performative because all actors share a common perception of the institutional linkage between capital markets and performance evaluation mediated by economic theory. Empirically, this means that managers will adopt strategies that improve stock market valuations,

and investors will select those companies with improved expected valuations, thus feeding back on current valuations. Then, a particular valuation can be maintained as an equilibrium of mutual expectations independent from other determinants of the company's value. This is mostly discussed in the context of 'short term' versus 'long term' strategy formation on the part of both managers and investors. It is often claimed that both sides converge on the alleged 'short-termism' in strategy development and strategy evaluation, thus driving managerial compensation to observable extremes, while investors ride the waves of the markets.

However, in this critique reference to the 'long term' cannot be made in any empirically meaningful way, as the future is all the more uncertain, the longer the time horizon. In other words, failure in the long term cannot necessarily prove that the original expectations were false, because certain conditions for success may have changed in an unpredictable way. Therefore, the compensation system may be efficient in the sense that only shorter term information can provide a basis for rational decision-making. Thus, the performative entanglement of models, behavioural assumptions and actualized behaviours is now apparent. Even though short-termism is a criticism frequently directed at the system, it seems to be the only rationally justifiable approach that can also build on available and reliable information.

This particular way of 'performing' the capitalist corporation has recently faced increasing public criticism, which has moved from the mere technical aspects of 'short-termism' to more moral qualms with what is seen as the outrageous 'greed' of unconstrained profit-making. Thus, economic theory and ethical considerations appear to remain in stark tension today. This tension, we believe, can be resolved by drawing upon the Hegelian perspective.

Paradoxes of designing corporate governance with separation of management and ownership

One of the consequences brought by the recent financial crisis is the growing public outrage over the alleged excesses of managerial incentive systems, especially in the financial sector, but also in the case of public companies in general (Joutsenvirta 2011; on the empirical patterns of CEO compensation see Frydman and Jenter 2010; Conyon *et al.* 2011). There are two major reasons for this. First, the widespread perception is that pecuniary incentives for top management are 'unfair' in the sense of leading towards unjustified disparities in personal income both within companies (gap between lowest and highest salaries) and in society at large; second, these effects are seen as being driven by deficiencies of the corporate governance regime, which seem to invite deviant behaviour, in particular on the part of the CEOs (this issue had already been raised in the aftermath of the Enron scandals in the US: see Akerlof and Shiller 2009: 33ff.; an influential opinion about the failures of governance and compensation schemes can be found in Bebchuk and Fried 2004). In the EU and in some countries such as Switzerland this has already triggered regulatory responses which move towards

the establishment of caps on bonus payments in the financial sector or even on general levels of managerial compensation. These approaches reflect popular calls for direct government intervention, but do not remedy the possible deficiencies of the corporate governance framework. Some critics therefore argue that improving the position of owners, namely, shareholders relative to the board of supervisors would be sufficient to hold in check those unhealthy trends in contemporary business and society. That being said, it is certainly remarkable that similarly extraordinary remunerations in the celebrity domain (athletes, movie actors, etc.) do not cause comparable public outcries.

The argument for corporate governance deficiencies often boils down to the observation that owners of publicly listed companies qua shareholders mostly do not control the process of determining top-level compensation schemes (Jensen *et al.* 2004). Frequently, supervisory boards have members from the same profession of managers or even include former directors; there is also the possibility that the chair position is assigned to the same person. Owners are often represented by delegates of large-scale organizations (such as pension funds) who are also managers, and not the individual owners of the assets they represent by their voting rights. Further, larger parts of company shares are widely distributed among small shareholders who do not have enough resources to influence top-level decision-making. These empirical facts have been well recognized in the literature on corporate governance and seem to limit the relevance of the classical argument in favour of high-powered managerial incentive schemes to resolve the principal–agent problem between owners and managers, especially those ones which link performance measures to variable compensation paid in the form of stock options; either the ultimate owners do not exert their control rights efficaciously, or they are, again, managers of organizations, like institutional investors.

The common theoretical underpinnings of recent managerial compensation models can be traced back to the fundamental idea of capital-market-based performance evaluation (building on a seminal contribution by Jensen and Meckling (1976), which triggered a vast array of variations and adaptations of their basic model). In public companies, ownership and management are separate. Since owners cannot directly supervise managers, information asymmetry is inescapable. Besides, owners often lack the incentives to do so because they own only a minor share of the company's assets, and may hold stocks of other companies as well. This is a typical 'voice' versus 'exit' decision problem: owners may simply adopt 'exit' strategies in expressing concerns about the performance of management; this will lead to declining values of companies on the stock market, thus affecting the wealth of all remaining owners. The latter will also 'exit' or feel a stronger motivation to interfere with the managerial decisions. As a result, the performance of managers is assessed on the capital markets 'at arm's length'. In this setting, a more direct connection is established between capital markets and managerial behaviour by making managerial compensation contingent upon the value of the company's stocks, as in the case of paying stock options as performance-related bonuses.[1]

This logic of managerial compensation is based on the standard theories of the firm and labour markets that we have already touched upon in earlier chapters. There is a twofold principal–agent problem: one is between the owners of the capital invested in the company and the top managers as agents; the other is within the firm, between executive managers as principals in relation to employees as agents. In this view, the owners of the capital invested into the firm are the only group that should have the right to fix the remuneration schemes for executive managers, since the employees merely stand in a contractual relationship with the firm and are subordinate to the former. This provides the direction taken by most current steps towards re-regulating the system (such as the 'say-on-pay' initiative in recent US legislation), as the perception is that the rights of owners have actually been undermined by current practices that allow for too much discretion and autonomous self-interested actions of management, when, for example, top-level executives (and not the shareholders) strongly influence the board of directors which fixes their remuneration schemes (Dew-Beckery 2009). As we have seen in the previous chapter, the Hegelian perspective, in contrast, emphasizes the *cooperative* nature of the corporation. We would therefore ask in which way the increasing inequality of incomes within the corporation between management and employees implies a weakening of its underlying cooperative principles.

Let us try to delineate the identities of different actors in the corporate governance setting by referring to assumptions about different revealed-risk preferences. Many discussions of managerial compensation seem to overlook the 'two-dimensional nature' of the moral hazard problem inherent in the relationship between owners and managers (on this, see Hellwig 2009, which goes back to the original Jensen and Meckling contribution): managers are expected to exert effort, which is difficult to observe, while owners expect them to take risk, because risk associates with returns on investment, but managers may tend towards minimizing risk. Thus, overall performance is the outcome of both effort and risk-taking.

If we distinguish between the roles and identities of managers, investors and entrepreneurs (which is partly a matter of definition) we will see that in public companies, owners are mostly investors, not entrepreneurs (in our definition, an entrepreneur would own a substantial volume of shares and play the role of CEO). Managers are not entrepreneurs because they do not fully assume the risks of obtaining only residual incomes, in spite of taking the operative entrepreneurial decisions.

Why are top managers currently remunerated on a performance-related basis? This is by no means a natural assumption, as many models of top-level managerial compensation in the past were actually based on fixed salaries, differentiating managers from entrepreneurs. This is especially evident if we look at the facts in cross-national and cross-cultural terms, including important cases such as Japan or France and the cultural context of understanding the identities of the different roles (Holden 2002), such as the 'manager as administrator' similar to a civil servant (for example, the old-style 'Bankbeamte' in Germany) vs the 'manager as entrepreneur'.

A textbook argument in favour of higher remuneration in the case of executives is to create incentives for risk-taking. The system of compensation thus becomes a tool to change the behaviour of managers as agents with a particular identity. In contrast to individual entrepreneurs, it seems justifiable to treat managers as being risk-averse because of their revealed preferences for a fixed income, so that presumably they only take risks with strong performance-based incentives. This also stands at the root of the original principal–agent problem: executives with fixed incomes will shun risk and try to gain benefits from perks.[2]

We can further distinguish two types of owners: investors and entrepreneurs. *Entrepreneurs* reveal a preference for risk because they intentionally wage their personal fortunes in entrepreneurial projects which face fundamental uncertainty. *Investors* as owners of financial assets are not identical with entrepreneurs, tending instead to play intermediate roles such as that of the venture capitalist. Generally, investors are not inherently risk-loving, but they often prefer higher levels of risk because the only way to reap super-normal profits is to adopt risky investments. This is the case especially if investments are flexible in their commitment or are short-term oriented. Then, depending upon their attitude to risk, investors would prefer to incentivize managers to adopt risky investment strategies such that super-normal profits can be generated, and they would sell their stocks at the moment when they perceive the risk levels to be too high in comparison with other investment opportunities. This applies especially when the investors are themselves agents who represent other financial organizations owned by other investors (principals), and if they treat investment in equities exclusively as financial investments – that is, if they do not exert direct impact upon strategic decisions (as in the case of shareholder activism). In this case, the argument is self-referential, because those who invest in these second-level financial corporations would incentivize their managers (who act vicariously as investors in first-level companies) to shift from risk-averse to risk-loving behaviour in order to generate sufficient rates of return on their investment.[3]

This argument is further bolstered if we consider the *market for executive managers*, in which compensation schemes not only serve to attract the best in the profession, but also function as a signalling and screening device because managerial performance is very difficult to evaluate even *ex post*. Top-level managerial decision-making is multi-tasking, which creates a difficult environment for measuring performance and establishing a proper balance across different tasks (see Roberts 2004: 140ff.); besides, the separation of individual responsibility and the effects of unexpected disturbances on company performance in a dynamic market environment can be very difficult.

The argument on the deficiencies of corporate governance has to be seen against this background, because originally the prevailing systems of managerial compensation were intended to overcome certain corporate governance deficiencies with regard to the proper evaluation and control of managerial behaviour (Matsumura and Shin 2005). Therefore, the design of pecuniary incentive systems was seen as a possible solution, short of transforming managers into owners. However, these systems then need to be based on proper mechanisms

for measuring managerial performance and for identifying the real causes of company performance, while keeping these two measurements separate. Again, the stock options and related schemes appear to be solutions that avoid the intricacies and possibly even perverse incentive effects of performance evaluation in multi-tasking, because managers perceive the changes in the company's value and attempt to influence it. Hence, there is no longer the need to identify and implement proper performance measures in a multi-tasking environment.[4]

To summarize this discussion so far, the recently adopted high-powered incentive systems have been designed to overcome certain deficiencies of the corporate governance structures in public companies with dispersed ownership. However, the reliance upon capital markets as a governance mechanism introduced new failures, which are mainly identified as *short-termism* in the strategy development of companies and *losses of control* in managerial compensation schemes. This tension is rooted in the underlying economic theories which provide the foundation for an interconnected set of institutions in corporate governance, capital markets and accounting. On the one hand, these theories suggest only one universal model for individual agency, namely the rational agent model. On the other hand, they implicitly assume that there are different types of agents, defined by their revealed risk preferences. The design of incentive systems is based on the assumption that these types sort themselves into the different roles of managers, investors and entrepreneurs, and that the design of incentive systems only needs to respect their rational response pattern in these roles, given their risk preferences. In the next section, we argue that this assumption is misplaced, since *the identities of actors are endogenous to the incentive systems*. These systems are institutions that are performative, implying the *performativity of identities* as well.

The performativity of incentive schemes

We have already argued that the described structure of managerial compensation schemes can be interpreted as a case for the performativity of economic theory. But there is another interesting form of performativity here which involves the endogeneity of the actor identities scrutinized in the previous subsection. If behaviour as expression is constitutive of identity, we cannot treat this identity as exogenous when designing incentive systems. The standard approach to incentive schemes presupposes the generic model of economic rationality in analysing the response of individuals to incentives. This is a most simple stimulus-response framework in which the economic model serves as a 'black box' description. In addition, money is assumed to be a strong incentive and a universal reinforcer that unequivocally steers behaviour into the direction desired by incentive system designers. Both assumptions have to be based on a fixed, exogenous and, at the same time, generic conception of the actors' identities. However, as the Hegelian perspective suggests, if people adopt a particular behaviour because of the incentives they perceive, this behaviour will also change their identities.

The problem with the standard economic approach here is that it is empirically flawed, while the Hegelian view seems to be vindicated by empirical

research. There is a series of experiments and field observations which show that individuals react to incentives in a diverse and often even opposite way. In psychology, this has generally been discussed under the heading of 'intrinsic' versus 'extrinsic motivation', often suggesting the crowding out of the former by the latter.[5]

Incentives trigger certain responses, but they are also signals that convey information (for a related model, see Bowles and Polanía-Reyes 2012). This *bimodality* can be accommodated into the general grounded cognition approach: incentives are stimuli, but also 'concepts' with a meaning and information content. Therefore, all incentive schemes depend upon the interpretive processes involved in the relationship between designer and sender on the one side, and subject and responder on the other. In their operations incentive systems depend on the identity of the involved parties, and on the interference of the signalling function of the incentives with those identities. In the case of pecuniary incentives the transformative effects of money (as discussed in Chapter 3 with reference to Simmel) deserve special consideration.

As shown in Figure 5.1 this bimodality of incentives entails a feedback loop between behaviour and incentive systems. If, for example, the designer implements a pecuniary incentive system and then observes expected behavioural responses, she will conclude that her underlying model of the actors' identities is correct, and will further fine-tune the system. Or, if she is not satisfied with the result, she might have different options, ranging from scrapping the system to enhancing the incentives in the same dimension. The latter measure might lead to expected consequences, hence affirming the original model.

This general understanding of the bimodality of incentive systems prompts us to consider standard examples of the seemingly counter-intuitive effects produced by incentive systems, starting with the transformative effects of money. Monetary incentives apparently tend to convert any kind of pre-existing relationships into a market-type transaction, thus profoundly changing the framing of the relationship. In particular, the incentive can be perceived as a 'price' for the behaviour in question. This applies for both penalties and rewards. In a much-cited example (Gneezy and Rustichini 2000), if parents are fined by kindergarten administrators for being late in picking up their children, the fine is actually perceived as a 'price' to be paid for coming late. Parents then evaluate the costs and benefits and may simply decide to pay the price. In fact, delays would even become more frequent.[6]

However, crowding out effects of this kind do not only apply in the case of social preferences and altruistic motivations, where they are especially strong. We cannot simply say that people do or do not have social preferences. Following the previous arguments, we do not assume that people have a certain fixed identity independent from the actual interactions and common forms of life. Hence, even the notion of 'crowding out' seems inappropriate because that suggests that social preferences exist and are simply subdued by the incentive scheme. The Hegelian perspective implies that the induced actions themselves transform the identities of actors. Preferences are institutions, and changing the institutional frame results in different preferences as manifested in the actions

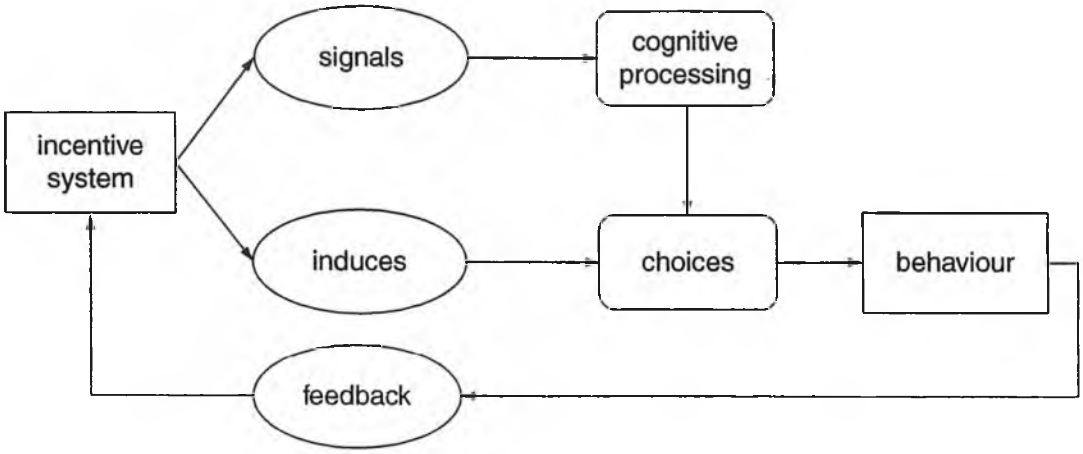

Figure 5.1 The bimodality of incentive systems.

taken. In other words, the standard economic approach to incentives is mistaken in assuming certain 'internal' structures that determine the response to stimuli; in fact, the external actions *are* the identity of actors.[7]

The Hegelian approach to expressivity of behaviour and identity can be interpreted in another way. The incentive system embodies information about agents' expectations concerning the ordinary behaviour of others (compare Sliwka 2007). This applies for both sides of the scheme, and not only for the individuals directly involved (Bowles and Polanía-Reyes 2012). The incentive scheme sends signals about the behavioural assumptions of its designer. This is particularly interesting if we think of the underlying economic model: then, the establishment of the scheme conveys the designer's beliefs that the respondent to the scheme is a 'rational economic agent'. If we assume that identity is shaped by mutual recognition, we might also consider the possibility that the object of incentives now thinks that the designer is a 'rational economic agent' as well, if only because she expects the designer to believe that they share their basic behavioural assumptions. Thus, even if the system is enacted unilaterally, in the context of a free-market-mediated working relationship between the two sides they mutually recognize themselves as 'rational economic agents'. Such is their identity in the further interactions within the frame. Because of this recognition actors will adopt those preferences which result in workable and sustainable equilibria in their interactions. In other words, preferences follow mutual recognition as a communication pattern provided by the incentive system.

Other informational aspects of the incentive scheme reinforce this effect. Even if a single individual tends to deny recognition of the implied identities, she might still treat the system as a signal of the beliefs the designer holds about the general composition of the population in terms of the agents' types or, indeed, as signalling the real structure of the population in these terms. Then, considering the forces that determine equilibrium conditions in economic interactions, she will also adopt pertinent strategies, independent from her own

'natural tendencies'. This, however, is irrelevant for analysing interactions and their results. The agents are their strategies; identities are what people do.

Interestingly a 'lemons market argument' can hold for the formation of identities dependent upon incentive systems (the classic is Akerlof 1970). Once the relationship between responder and designer is transformed into a market-type relationship, an additional effect occurs if we now consider the uncertainty about the average type of players in the system of interactions. The 'lemons market' argument suggests that there is an information asymmetry in markets with quality uncertainty between buyers and sellers. This argument also applies for types of players: consider the designer of an incentive system that puts a monetary price on performance. Since he does not know the true 'quality' of single individuals, the system will be adapted to the perceived average quality of respondents. Then, individuals with very strong performance values and attitudes may consider the reward adapted to average respondents as being too low. In a market-type framework, this implies that they will leave the interaction scheme, thus triggering a deterioration of the average quality of respondents. However, as we have seen previously, they might also adapt to the environment, which means that they would simply respond to the incentive like the indicated average type of agent. This, again, changes the average in the population.

Considering these two possible reactions, we can envisage a scenario in which those two different types of actors segregate themselves (for a classical related analysis, see Kranton 1996). One type adapts to the mutual behavioural expectations, the other moves into a non-market environment. Then, on the one hand, there is an expanding 'market type' environment in which most actors indeed behave like 'rational economic agents' in terms of opportunism and maximization of benefits, thus actually vindicating the original assumptions in the design of the system. On the other hand, a non-market domain of interactions will emerge in which actors gather who keep different kinds of identities, manifesting higher levels of effort, trustworthiness and so forth: think of managers separating into profit-oriented and not-for-profit organizations.

We can generalize this observation in terms of the aforementioned distinction between extrinsic and intrinsic motivation. From the viewpoint of the market-type environment, intrinsic motivation is an efficient (since cost-saving) form of motivation. People would adopt behaviour that matches with the organizational goals without the need to incur monetary costs in triggering this behaviour. At the same time, intrinsic motivation as such is not necessarily a universal characteristic of individuals: depending on the kind of action, all individuals also react in response to extrinsic motivators. Now, the problem is that the combination of and the boundary between extrinsic and intrinsic motivation are not fixed and given, but partly depend on the incentive system. Thus, adopting an extrinsic motivation system can crowd out intrinsic motivation, thereby creating additional needs to reinforce extrinsic stimuli because intrinsic motivation is reduced, and to increase the overall costs of the incentive scheme. The situation is ambiguous: the market environment would certainly give special advantage to low-cost organizations with high levels of intrinsic motivation, but this environment

reduces the share of actors with intrinsic motivation (compare Bowles 1998). Interestingly, this might imply that market competition can lead to the selection of organizations that adopt the efficient combination of motivators, yet this mix might depend on contextual factors and non-market determinants which somehow must be sheltered against the eroding impact of market-driven determinants of behaviour (compare Platteau 1994).[8]

To sum up: the performativity of managerial incentive systems results from the fact that incentive schemes co-create the identities of participating actors, such that we cannot define an external anchor for analysing the effects of those schemes upon behaviour. This kind of performativity interacts with the performative effects of economic theory which support a certain conceptualization of the generic identities of actors, thus reinforcing the notions underlying the systems of extrinsic pecuniary motivation. Actors explicitly perceive themselves as being economic agents and will adopt the corresponding behaviours, as is well demonstrated in the famous experiments showing that economics and business school students tend to behave according to the economic model, much more closely than students of other disciplines. Taking both aspects of performativity together, we can arrive at normative and pragmatic solutions to the question of executive managerial compensation.

A new approach to the design of executive managerial incentive systems

Performativity of incentive systems implies that their design is not an issue of economic efficiency, but of ethical life in the Hegelian sense. Given the endogeneity of actors' identities to the incentive system, we cannot provide an exogenous criterion of efficiency (such as the 'transcendental' position criticized by Sen and described in Chapter 4). Therefore, fixing a certain incentive scheme is an ethical decision. However, the Hegelian perspective on this decision differs from most approaches to these problems in terms of business ethics, for it involves not only the particular issue of choosing between different specific approaches to incentive systems, but also refers to the choice of the correlated identities of actors, generally opting for a particular form of ethical life – that is, a decision about the kind of society and economy in which actors wish to live and act.

In the current public debate, the problems of designing corporate governance in financial capitalism have recently been accentuated with regard to the ethical dimension, but in the non-Hegelian, particularistic sense. The strong pecuniary incentives related to the short-term profitability of companies have created incentives to enhance profitability by violating certain legal prescriptions. The classical case is the Enron debacle, which is also of interest because it reflects the 'marketization' of the accounting rules (Akerlof and Shiller 2009: 33ff.). Next, risk aversion can be expressed in risk-shifting strategies, such that risks accumulate as externalities beyond the corporation (Sepe 2011). Finally, the gap between managerial compensation and ordinary wages is increasingly perceived

as being 'unfair', thus also triggering broad societal backlashes against 'the rich' (Dew-Beckery 2009). Leaving out the plainly illegal abuse of accounting rules, we concentrate on genuinely ethical concerns referring to externalities and fairness issues.

Can we establish rules that govern the social acceptance of risk-taking externalities? We take for granted the assumption that risk-taking as such is a desired behaviour because it is an inherent element of innovation and entrepreneurship. There is the common perception that personal liability should be limited because the gains from risk-taking also contribute to the welfare of society. Such 'risk sharing' is ubiquitous in the institutional setting of modern societies, and as such is a desired phenomenon. The question is how far risk-shifting should be enabled, and to what extent, beyond the scope of legal rules, there should also be corresponding ethical constraints. For example, environmental ethics would impose ethical restrictions on adopting certain technologies in spite of the fact that they are legally permitted. Managerial incentive systems clearly arouse ethical concerns regarding the risk-taking behaviours they trigger. As shown above, this depends on the degree to which these systems create externalities. This point is implicit in the current debate, when one opinion suggests that the design of incentive systems be left to the owners, i.e. the shareholders. This would imply that there are no substantial externalities of these arrangements which concern other groups in society, and the resulting ethical issue would remain an intra-group one, affecting the relationship between owners and managers. In this case, if owners agree to shower top executives with bonuses and golden parachutes, this is their own private matter, and the results will be sorted out by market competition.

Nevertheless, there are good reasons to suspect that company-level designs of incentive schemes involve externalities. These were observable during the crisis of 2008, where financial incentive systems at different stages of handing out mortgage credits, bundling them into derivatives, and assessment by rating agencies contributed to a systemic destabilization of the entire financial architecture. A more specific form of externality refers to the collusion of interests between owners and managers in shifting risks to all groups who have fixed claims on the corporation. This is particularly true and salient in the financial domain, with the standard approach being to maximize returns on equity by leveraging a bank or a company (for a comprehensive analysis, see Ferrarini and Ungureanu 2011). In this case, both shareholders and managers will agree on a high-powered incentive system driving excessive risk-taking because a part of its costs can be handed over to those parties with fixed claims, such as the depositors in a bank. This gives the reason why the design of incentive systems cannot be left solely to the owners, i.e. the shareholders. However, beyond these different financial constellations we can now also argue (following our analysis of the corporation in Chapter 4) that certain stakeholders can also be seen as having fixed claims on the company: in particular, all employees who invest in building company-specific human capital have claims on the future existence of the company and the corresponding income flows, because they can only reap a return on this

investment within the company, comparable to the future interest payment on deposits and other forms of debt in the case of financial institutions.

Another kind of externality concerns the impact upon identities. A simple version of this argument is often presented by industry representatives who point out that companies cannot withdraw from the rat race of increasing incentives because otherwise they would lose their 'best talents'. Although such a 'race to the bottom' would support voices in favour of government intervention, this is not a genuine externality. Genuine externalities result if the company's specific signalling effects about the type of actors dissipate throughout the industry through the manager market, possibly exacerbated by imitating industry leaders (since the borderline between intrinsic and extrinsic motivation is endogenous to the incentive system). Hence, in this case imitation can turn into an essential element of performativity.

In Chapter 4, we suggested that externalities of this kind call for the design of an institutional framework which allows for internalization by virtue of endogenously developed ethical norms. As we argued, these norms typically prevail in communities of individuals who share a purpose of life, such as professional associations that can provide the institutional setting for the formation of identities, and the means of securing individual commitment to norms independent of concomitant means of enforcing those rules. This approach differs from regulatory suggestions that concentrate on government intervention.

This contention is anything but new in the context of incentive systems. The institutional setting in which the formation of managerial identities takes place was discussed in an influential critique of managerial education in the United States (Ghoshal 2005). Ghoshal argued that managerial education was a main culprit in the corporate scandals of the dotcom era because the mainstream models of management taught at business schools largely followed the Williamson-inspired view that agents always act opportunistically and egoistically, and that the design of incentive systems has to appeal to their extrinsic motivation in order to achieve the desired performance. People trained in this sort of economic analysis would act accordingly, believing that most actors in the economy act in this way as this is theoretically and empirically warranted, and, as designers of incentive systems, just applying the acquired knowledge. As seen in the previous section, the majority of actors in the economy may adopt the corresponding identities. If they do, this confirms the expectations of the designers, such that the entire pattern of interaction becomes performative.

This analysis shows that the performativity of incentive systems is partly rooted in another set of institutions, in which theories and other symbolic representations are created which then guide the design of incentive systems (Herrmann-Pillath 2013b). Hence, the analysis of performativity needs to consider this enlarged institutional setting. In the Aoki framework, incentive systems may be regarded as public representations connecting the different institutional domains of academia and business. Performativity of economic theory is joined by performativity of incentive systems due to managerial education in which the transmission of knowledge about incentive systems takes place.

As shown in Figure 5.2, this means that we treat incentive systems as institutions in two different contexts. In the academic domain, incentive systems as theoretical constructs are elements of conceptual and institutional continuum. This implies that institutions guide the formation and the interpretation of concepts, and the *concepts themselves are institutionalized.*[9] In this case, the intellectual evolution of different concepts underlying the construction of incentive systems such as 'principal–agent' or 'asymmetric information' is guided by institutional arrangements of academia, especially business schools. The institutional reproduction of those concepts and their particular meanings takes place in collective-level contexts of academic competition that can be analysed on sociological terms. Then, there is feedback between the concepts and the disciplinary identities of scholars: the use of concepts defines what 'is' an economist as compared to a sociologist, an anthropologist and so forth (for an explicit textbook statement, see Brickley *et al.* 2009: Chapter 2). Disciplinary identities are embedded in the groups that represent academia in the particular field of economics.

This interrelation of conceptual evolution and identity formation interacts with (and mirrors) another loop of interdependence in which applied incentive systems impinge upon the identities of economic actors. Both loops are connected through different channels that are not made explicit on the diagram (but which are implicit in the box with broken lines which indicates behavioural dispositions). For one, students at business schools later turn into the objects of

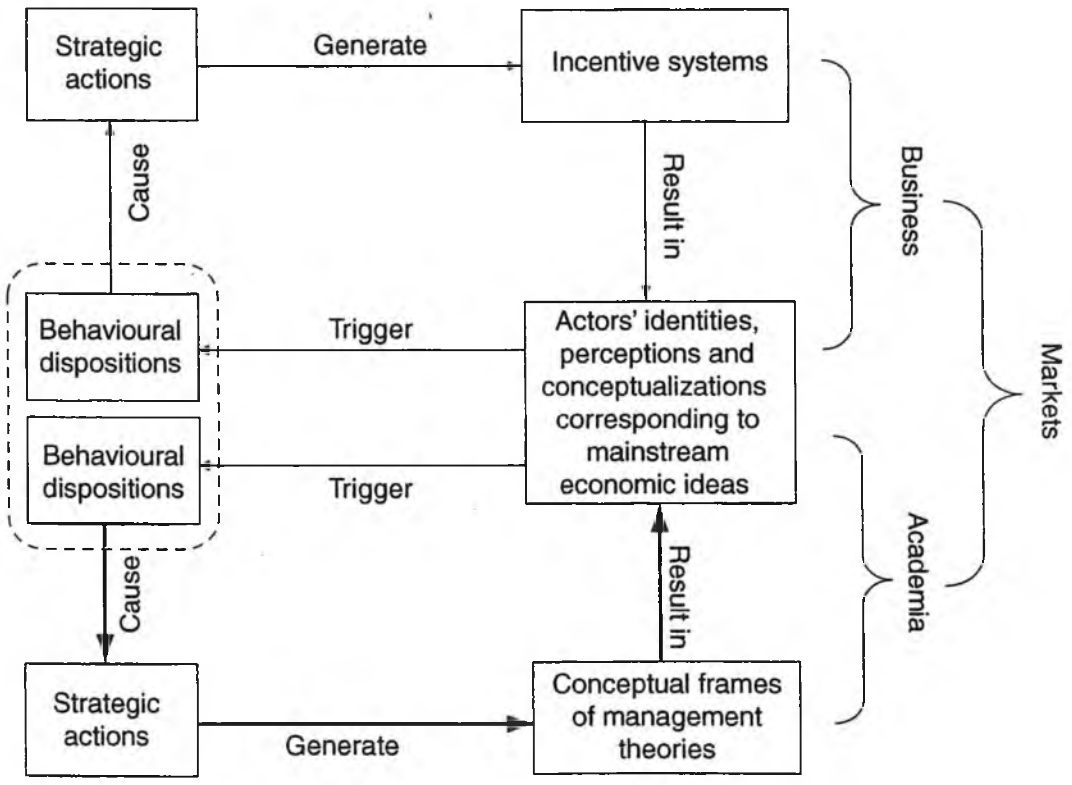

Figure 5.2 Performative loops connecting academia and business.

incentive systems. If the identities in the two loops converge on certain characteristics, the assumptions are mutually confirmed and stabilized. That is, managers behave according to the predictions yielded by the economic models which, in turn, define the disciplinary identities of economists.

What could be a solution to the problem in the Hegelian perspective? It is necessary to explicitly install institutional mechanisms by which the affected individuals can reflect upon the interaction between incentive systems and identities, so that they are enabled to take a comprehensively rational decision about both rules and correlated identities. Incentive systems define identities, and these identities must be *recognized* in the pertinent communities. For example, in recent debates over the 'economization' of the medical system some critics argue that economic incentives change the nature of the relationship between doctor and patient. This discourse has to be taken seriously, and hence the affected groups have to mutually recognize the desired identities in the relationship.

But who is an affected party in the case of managerial incentive systems? Following the analysis presented in the previous chapter, this refers to the pattern of externalities created by the actions taken under a particular institutional regime. At first sight, incentive systems are matters of organizational design. For example, investment banks may implement them for traders in financial markets. Then, given the principal–agent problems and asymmetric information, externalities may involve the owners of financial assets managed by those organizations. As we argued, this is a standard problem in corporate governance.

Leaving the responsibility of incentive systems design to the shareholders does not solve the problem: in large public companies the shareholders, such as pension funds, might be corporate organizations as well, so that the discourse over incentive systems remains within the community of managers. In this case, externalities reach from the communities of managers to society at large, or stakeholders. We have already introduced a number of additional arguments when discussing the actors who hold different kinds of fixed claims on a corporation.

A remedy to the problem of dysfunctional incentive systems, along the lines of our normative analysis presented above, is to establish *standards in associations of managers*.[10] The general idea is that standards for incentive systems (for simplicity, consider a cap on top executive remuneration or certain constraints on adopting high levels of risk) can be established in a public discourse among members in order to constrain the possible negative effects of competition which result in excessive risk-taking and other dysfunctions. These standards can be compared with other standards, such as those relating to product safety and quality that are adopted by industry associations. Their aim would be to provide a shared regulatory setting for company-internal remuneration schemes affecting the market for managers.

However, this does not preclude collective races to the bottom. Therefore, manager associations also play an important role in representing managers in the processes of societal recognition, linked to the institutions of managerial education in a way similar to the medical associations. This is particularly important

if, in the public discourse, the perception gains ground that incentive systems are no longer an internal affair of managers' self-organization, but cause externalities affecting society at large. In this case, managerial associations can gain an enormous significance in the 'struggle for recognition' that takes place in different domains, such as conversations with government regulators or the media. As a result, the establishment of certain standards for managerial compensation by those associations would simultaneously define the identities of managers both among themselves and vis à vis the common ethical life.

Following the analysis of the corporation as a cooperative venture in Chapter 4, there is another aspect that we need to pay attention to, namely that the identities of managers also need to be defined relative to the other partners in this cooperation. Aside from the owners, these are the employees. The distribution of earnings within the corporation is also subject to considerations of fairness, and incentive systems should be evaluated in a deliberative process within the corporation. This means that corporations should provide a channel for co-determination so that the compensation system is recognized by the employees. This distinguishes the present approach from the established economic theory that only emphasizes the role of owners as investors. These channels of co-determination can be specific to the domain of remuneration, or can just build on pre-existing arrangements. For example, in Germany co-determination applies for all companies above a certain size. In our view, this culture suggests that the supervisory boards be involved in setting remuneration schemes, because employees are represented here (if we only enhanced the role of the general shareholders assembly it would jeopardize this necessary channel of recognition). This does not mean to deny the fact that employee representatives also pursue their own interests, thus creating the potential for other externalities (for example, pushing for higher wage levels, to the detriment of owners).

There is an additional question: that of whether managerial associations are specialized along industry lines. In the traditional labour/capital conflict regime, both trade unions and employer associations are typically organized around industries. In our perspective, there are other options, depending on the larger context. In particular, managerial associations, as scrutinized previously, may be generic – that is, focused on the profession of managers, or top-level managers, independent from industries. This is in line with the American understanding of 'management' as a general purpose activity, whereas in countries such as Germany there are strong traditions of industry-specific management, mainly due to the fact that executives often have related degrees (such as in engineering) and have therefore worked in a particular industry for a long time (on the German conception of management, see Armbrüster 2005).

Industry associations may also *include both employees and managers*, thus breaking up the traditional labour/capital divide and moving in the direction we would recommend ourselves. In this case, we can think of first recognizing industry standards for managerial incentive systems in the cooperative relationships between employees and management on the industry level, and further specifying them on the level of the corporation.

Thus, a framework for establishing principles of managerial compensation would look like Figure 5.3:

At the centre, we have the recognitive relationships within the corporation, by which executive incentive systems meet consent by owners, employees and managers. These relationships are complemented by the standards developed in the managerial and industrial associations. The former define ethical standards for generic top-level management positions, which also serve as a reference for establishing industry standards that guide the recognitive relationships in the corporation. All of these interactions take place in the public sphere – that is, they are open to scrutiny by public opinion. Thus, for example, the design of the compensation model for the CEO position may be determined by a process that involves owners, managers and employees. This process takes place in the public sphere of the corporation, mediated by assemblies, online fora, etc. Arguments in the deliberation refer to the standards developed in the associations. The general standards for CEO compensation give benchmarks for the generic properties of incentive schemes, such as the role of stock options, whereas industry standards reflect the particular conditions in the technological and organizational context of the industry. The results of this company-level deliberation and decision-making are transparent to the public and feed back to the associations and 'civil society'.

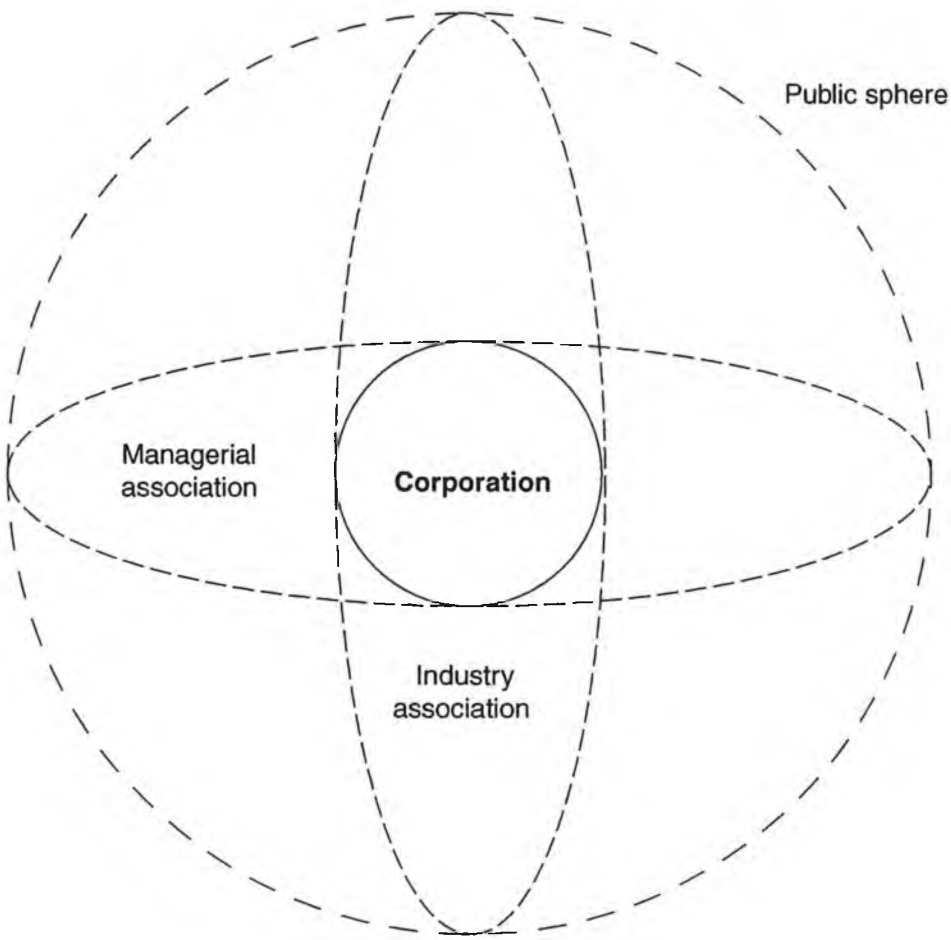

Figure 5.3 The associational setting of designing incentive systems.

All in all, managerial incentive systems should be treated as an ethical issue that cannot be resolved only in the relationship between owners and managers, as the standard economic approaches suggest. The very fact of public concerns about the recent developments and the analysis of externalities produced by these schemes shows that a broader deliberative process of recognition is indispensable. The recent public debate also demonstrates that the current practices are run parallel to the growing insulation of economic theory from the societal context. In particular, an 'objective' approach to the design of incentive systems was proposed, but this is flawed because the theory (as a moment of 'spirit') is performative and contributes to the formation of identities that determine the ways in which actors respond to those systems.

This also implies that incentive systems are embedded in the larger context of society, politics and culture, constituting the moments of ethical life. What is seen as an appropriate scheme in the United States may fail to be a viable approach in Scandinavia, and 'realization-focused comparisons' are certainly more appropriate here than the implementation of an ideal logic. The contextualization of economic theories happens in public discourse, which is always specific to space and time. Merely copying models of governance across countries, allegedly following universal principles of economics, fails to establish viable and sustainable institutions and practices. This also manifests a distinct movement towards *a more useful economics* that could incorporate the insights of the proposed analysis. That being said, it also has to be acknowledged that many corporations nowadays operate globally and aim at establishing global corporate cultures. The deliberative process then necessarily includes the perspectives of 'third parties' in the sense of Sen: in discussing institutional arrangements in the US context, we may need to take into account the French experience. Then, the universalization of economic approaches to incentives would not happen via the direct application of abstract and universal economic theories, but via the historical process of globalizing business.

Endogenous normativity of international trade policy

The institutional void in mainstream trade theory

There is a well established tension between the theory and the reality of international trade. Trade theory aims at reducing the observations about international trade to a set of simple principles, such as the theory of comparative advantage, which has recently enjoyed a renaissance (Eaton and Kortum 2012). In this analytical reduction, the institutions of trade do not matter in any essential way. On the other hand, the reality of trade manifests a secular trend for increasing institutional complexity.

For example, the long Doha round in the multilateral trade policy regime reflects the complicated nature of negotiating about a broad range of institutions among a large number of countries, while at the same time regional trading agreements proliferate which define distinct sets of institutions holding for their

members, partly transcending the current scope of multilateral agreements. While the role of institutions is recognized in many fields of economics, trade theory aims at explaining institutions, if at all, in terms of its own principles, such as when approaching the political economy of trade in the Heckscher-Ohlin framework (Rodrik 1995; Leamer 2012).

This theory is mainly shaped by the general equilibrium modelling of both competitive and imperfectly competitive markets. As such, it claims to be purely positive, but, similar to behavioural economics, the impetus for further research comes from the observation that real-world trade policies do not correspond to the normative implications of trade theory. The normative gap becomes the object of positive analysis. The aim of this section is to approach the reality of trade policy by drawing on the economic thinking proposed above, in such a way that positive analysis can unload the normative burden from its endeavours, and to show how the normativity of trade policy emerges endogenously in a process of realization-focused comparisons.

In mainstream positive theories of international trade policy, institutions are approached in terms of politico-economic equilibrium models that are checked against reality (for classical approaches, see Grossman and Helpman 1994, 1995 and Bagwell and Staiger 2002). Institutions are regarded as *constraints* on trade, which are embodied in politically imposed costs, such as tariffs. In comparison, the common view of institutional economics would assert that institutions *enable* trade.

The prevalent idea in trade theory rests on the principle of comparative advantage, which is simply an application of the even more general principle of opportunity costs. The principle of comparative advantage is mainly used as a normative statement, but is actually a positive analysis of the state of free trade, showing how and why in this state all sides gain in terms of increases of consumption and hence welfare. Based on this positive analysis, trade theory draws the normative conclusion that free trade is the optimal institutional arrangement in international trade. Then, free trade appears as a state where market transactions are no longer encumbered by politically caused costs of trade.

'Free trade' means that all institutional impediments to the individual freedom of trade are abolished. Thus, the theory of free trade corresponds to the Hegelian level of personal freedom. This perspective lies at the root of the specific view on institutions in established trade theory: 'free' trade is implicitly seen as being free of 'institutions as constraints', because historically, beginning with Adam Smith, the main concern of economists was the institutional restrictions on free trade imposed by governments, such as licensing and granting monopolies (Irwin 1996). 'Free trade' then happens in the domain beyond the reach of governments, including in the literal sense of its location, such as maritime trade. This particular perspective made economists blind towards the enabling role of institutions in international trade; similarly, the pivotal role of the different means of projecting political and military power in the expansion of 'free trade' was also repeatedly overlooked by economists (compare Findlay and O'Rourke 2007, who explicitly point to this bias in economic analysis).

Even though markets clearly are institutions themselves, so far in economics there have been few systematic approaches to analysing the trade-enabling role of institutions. In contrast, political scientists created the discipline of 'international political economy' in which institutional issues are quite prominent, even to the extent that some concepts have, to a substantial degree, been imported from institutional economics (Gilpin 2001; WTO 2007: 64ff.). Yet, the research questions differ, and there is less focus on the direct role of institutions in enabling international trade (for a seminal approach which merges these different research traditions, see Yarbrough and Yarbrough 1992).

If we look at the established political economy of international trade in economics, there is an illuminating parallel to the analysis of the individual in economics. The simplest textbook argument on free trade assumes collective welfare functions for entire countries, thus aggregating the losses and gains from free trade over all affected groups in society. Then, the theory basically corresponds to the opportunity cost principle in explaining the division of labour among individuals. If we open up the black box of countries, this amounts to the same step as when analysing individuals in terms of 'multiple selves'. The problem here is how to explain the emergence of free trade from the interaction between different domestic *interest groups*. As in the case of opening the black box of individuals, failures of 'rational action' are explained as the result of internal interactions between the parts of the whole. Interest groups play the crucial role in modern trade theory views on institutions: they exert influence on governments such that the latter choose to deviate from the 'rational' policy of free trade.

This is our first point of entry for introducing a Hegelian perspective: can we develop an alternative view on the interaction between interest groups and trade policy by applying our concept of *associations*? In which sense can we rethink the role of interest groups as Hegelian 'associations' whose activities are necessary to endogenously create trade-enabling institutions? Indeed, there is an illuminating parallelism between the equilibrium political economy approaches à la Grossman and Helpman and the analysis of individual behaviour in the previous section of this chapter: in the former, material incentives such as political donations by interest groups and election outcomes determine the behavioural choices of politicians, thus guiding individual behaviour, similarly to the economic analysis of incentives. In contrast, the Hegelian view would emphasize the role of ideas, political commitments, and expressions of interests and values in shaping a 'deliberative' process without which the enactment of trade-enabling institutions would be impossible (these differences in political economy approaches are often emphasized in contributions to the notion of 'deliberative politics': see Elster 1998; on the role of ideas in trade policy, see the seminal study by Goldstein 1993).

However, the difficulty in extending our approach refers to a shared viewpoint in both Hegel's original ideas about institutions and modern trade theories: namely, that the international domain is devoid of any sort of government and hence any binding legal arrangements. For Hegel, international relations were seen as staying in a state of nature, while civil society was conceived as

pertaining to the national contexts. Moral principles, Hegel claims, cannot hold in the international domain, contra Kant, leading to the much-criticized views on the role of war in inter-state relations (see the overview in Schnädelbach 2000: 323ff.). Hegel adopted what in modern international political economy is labelled the 'realist' view (Baldwin 1993): states represent national interests and they struggle with other states in pursuing those interests (see Chapter 1, on the role of *Weltgeschichte*). In the context of international trade, this perspective can be seen as a positive one, in contrast to the normative approaches that often emphasize the Kantian viewpoint (such as Petersmann 1997: 23ff.; for an overview of different constitutional and legal approaches, see WTO 2007: 79ff.).

These normative viewpoints follow Kant in the idea that international political order is a precondition for the existence of national civil society, because citizens' rights have to be established internationally, such as the right to trade freely with citizens of other countries. In these views, free trade is an individual right, whereas real-world trade policy, as governed by the rules of the WTO and GATT, treats the right to market access as the right of countries. Yet, we will extend this analysis to the question of how far the current practices of trade policy actually provide the framework for the endogenous emergence of normative structures in international trade – that is, we interpret these institutions as frameworks for 'realization-focused comparisons' in order to show that the idea of 'free trade' can no longer serve as an exogenous yardstick for assessing the reality of trade policy.

Modern trade theory shares with Hegel the assumption that there is no supranational enforcement of institutions. These can only emerge from mutual agreements among countries which are self-enforcing – that is, which can be stabilized by sanctions mutually imposed by the countries themselves. Modern international trade policy institutions can be seen as 'civilized forms' of trade wars, reflecting the historical watershed of the Bretton Woods institutions after the 1930s experience of rampant protectionism and the collapse of world trade. However, under certain conditions – such as the requirement that no country has the dominant power position and is 'large' relative to others – free trade should emerge as the equilibrium institution in this endogenous equilibrium framework of international political economy. The optimal institutional decision would be the strategy of *unilateral liberalization*: all countries perceive the same incentive to adopt free trade, and simultaneously abolish all institutional impediments. In the subsequent argument, it is therefore essential to view the institutional void in mainstream trade theory in a double sense: one is the absence of trade-enabling institutions in the analysis of trade, and the other is the absence of trade policy institutions against the background of the 'rationality' of unilateral liberalization.

This approach requires thorough reflection because it means that in order to establish free trade, negotiations or agreements among countries would not even be necessary. Unilateral liberalization implies that it is not necessary to mutually recognize the policy, since every country can just 'go alone' (Bhagwati 2002). So, what we see is an equivalent to the 'invisible hand' view of markets: all

countries pursue their self-interest and the optimal – i.e. welfare maximizing – institutional regime emerges as an unintended effect. Although this might appear to be unrealistic, the strong point in relation to the 'real world' is still that we indeed have good reason to think that, for consumers, in most circumstances free trade tends to be beneficial, since they get access to a greater variety of goods at lower prices. The trouble with trade theory normally occurs when considering producers who lose against foreign competitors; this, however, also includes consumers as workers in those losing industries.

In our approach, we will focus on an important new development in recent international political economy, which is *the rise of consumers as an interest group* expressing particular welfare concerns which are multidimensional, i.e. are no longer simply measured in terms of prices and quantities, but in terms of concerns about food safety and ecological morality, for example. Then, one cannot simply equate the exogenous norm of 'free trade' with generic consumer interests, but must refer to the endogenously evolving normative conceptions of trade.

Paradoxes in the phenomenology of international trade policy

Once we consider interest groups and open up the black box of countries, the equilibrium approaches can be used to explain the international strategies of countries in terms of domestic interest group politics. This is mostly done by analysing political support: interest groups support political parties that represent their preferences (Hillman 1989); competition among interest groups results in winning propositions which are then represented internationally by the government. This 'protection for sale' framework can be easily reinterpreted in the light of established approaches in political economy which explain the relative influence of interest groups by hypotheses such as Olson's about the role of the relative size of lobby groups.[11]

We will now briefly discuss these approaches with respect to one important issue, which allows us to launch the Hegelian alternative view on international trade institutions. This is the emergence of *paradoxes* once the equilibrium view on trade is extended to include a comprehensive politico-economic equilibrium. We proceed in the Hegelian mode by taking the aforementioned parallelism between the analysis of the individual and the analysis of countries seriously and applying a dialectical reasoning on international trade policy in which the identification of paradoxes and self-contradictions plays a driving role in achieving an improved understanding of real-world phenomena. We can also refer to our discussion of Sen's juxtaposition of transcendental institutionalism and realization-focused comparisons.

The theory of international trade is an example of transcendental institutionalism: it establishes the ideal benchmark for evaluating trade policy, and all real-world institutions are measured in terms of the distance from this benchmark (compare endnotes 3 and 4, Chapter 4). This is the deeper reason why the theory cannot properly assess the trade-enabling role of institutions. Once it includes

the political economy of interest groups, it adopts the perspective of realization-focused comparisons, because this requires consideration of the impact of changing trade policies on the particular welfare position of different interest groups and of the consequences for the viability of particular institutions. However, the latter approach remains in principled tension with the equilibrium setting of the overall analysis, which remains wedded to the transcendental view. As a result, there is no longer any reliable and universally valid way to rank different institutions of trade policy, as has always been done by the 'transcendental' approaches of the past, which argued, for example, that subsidies are always preferable to tariffs because they are less trade-distorting. The reversal of rank orders and hence the loss of universality happens because in endogenous trade policy the resource use for political influence has to be included in the equilibrium analysis.[12]

This leads towards paradoxes of normative political economy that inherit the so-called 'determinacy paradox' (Bhagwati *et al.* 1984), following the theories of 'second best' and other extensions of equilibrium approaches in international trade (Bhagwati 1982; Srinivasan 1996). These paradoxes stem from the self-referentiality of comprehensive politico-economic equilibrium models, in which the different expressions of political support simultaneously generate the standard for ranking institutions (see also O'Flaherty and Bhagwati 1997; for an extensive discussion of these and other paradoxes, see Herrmann-Pillath 2004). In an extended view on politico-economic equilibrium, all political action also consumes resources, and this needs to be included in welfare assessments. So, we have to consider the resources spent on lobbying in favour of tariffs or in favour of subsidies: in the standard theory lobbying is a waste for society, as these resources are not invested in production; therefore, the more efficient institutions are those that generate fewer incentives for waste, which are the tariffs, because they dilute the incentives for lobbying, as compared to subsidies, hence overturning the standard ranking of institutions.

If we consider the position of an observer who has to decide which institution is the optimal one, she does not have a vantage point from which she can assess the status quo. In the status quo, as seen in the light of equilibrium approaches, all information about gains and losses from institutions has already been processed, and all interest groups have already chosen their actions, depending upon their perceived gains and losses. In the general politico-economic equilibrium, only perceived gains and losses count, because they determine the incentives which sustain institutions. Therefore, the observer can no longer adopt the 'transcendent' viewpoint, and Voltaire's Dr Pangloss comes to his right – that is, arbitrary status quo positions have to be accepted as the optimal states.

In sum, the equilibrium view, combined with interest-based politics, can no longer identify any criterion for ranking institutions in the sense of identifying improvements of the status quo. But realization-focused comparisons do not work either. *Neither the transcendental nor the comparative assessment of institutions is possible.* This amounts to a fundamental *paradox* of the free trade

doctrine: *free trade is the most efficient institutional regime, viewed from consumer welfare, but this only holds in a world with no politics*; in the real world, where preferences over institutions need to be expressed by citizens, there is no way to justify a universal preference for free trade, since all realized states can be rationalized as the optimal ones.[13]

All of these troubles are created by the extension of the equilibrium framework into political economy. But we interpret them as conceptually productive, in a dialectical fashion, because they point towards possible resolutions of the paradoxes. The comparison with the individual is again helpful. In the Hegelian perspective, the individual can only assert herself as a person through *recognition* from other individuals. Without this recognition, individual subjectivity is entangled in internal paradoxes which emerge from the need to take action which only becomes meaningful in the context of social interaction and common practices. We propose extending this line of thinking to international political economy: only by engaging in international relations can the government establish a meaningful domestic state of political economy in which improvements of institutions can be evaluated in a reliable way.

This implies that the *unilateral adoption of free trade is not a viable notion*: this political action can never be stable, given the paradoxes of ranking institutions in a closed and comprehensive domestic politico-economic equilibrium; therefore, commitment to free trade is only possible in a global institutional regime in which the different countries mutually recognize the scope and concrete meaning of the notion of free trade, and agree on an institutional framework within which this freedom is established.

Performing the social in international trade policy

Let us consider another paradox associated with the standard view, which reinforces our previous results regarding the impossibility of viable and sustainable unilateral liberalization, given the arbitrariness of endogenous rankings of trade policy. If we expand the equilibrium framework to political economy, unilateral liberalization fails to be a sustainable institution because there is no possible way in which a country can commit to this policy through time. This problem goes back to the general specialization dilemma in exchange, which is often interpreted as the prisoner's dilemma in international trade policy (see, for instance, WTO 2007: 50ff.; on the generic specialization dilemma in game-theoretic terms, see Kliemt 1986).

Consider two parties which aim at establishing a division of labour by means of specializing in certain lines of production which represent their perceived comparative advantage. After agreeing on this division of labour, the two parties can take different steps that cannot be observed by the other side, thus opening up the possibility of cheating on the agreement. First, if production cannot be observed directly, they might refrain from specializing, because this will later change their relative power to renegotiate the agreement: the less specialized party can achieve a more advantageous threat point. Second, they might take

unobserved actions that restrict exchange to the detriment of the other side, thus allowing for a redistribution of the benefits from specialization. In international trade, for example, this scenario corresponds to the situation when countries agree on free trade, but later adopt measures such as non-tariff barriers to trade that are difficult for the other side to directly observe and which limit their own specialization by means of protecting their import-competing producers. Now, both parties will anticipate these possibilities and thus both will refrain from specializing to the largest possible degree. Therefore, benefits from the division of labour are smaller than under the ideal institutional regime of free trade. This is a classical prisoner's dilemma, resulting from the application of the standard conditions: no credible communication between the parties, no possibility of credible and binding pre-commitments, and no direct observability of actions. Considering democratic politics in international trade, the two parties will also reasonably assume a short time horizon defined by the electoral periods, so that the interaction cannot be interpreted as an infinite one, which could otherwise be meaningful once we considered states that persist eternally.

In international trade, this means that unilateral liberalization is not a credible policy. Thus, even if a government knows that free trade is beneficial, it cannot simply announce this policy and then expect that other countries will specialize accordingly. This is the Hegelian turn of the argument: the individual country cannot commit itself to the best policy and take this as the sole condition for achieving its self-interested aims, because it essentially needs the recognition of the other country, meaning that the policy is seen as being credible by the other side. This is further reinforced when considering the domestic political economy: even the home government cannot predict with certainty that a policy of unilateral liberalization will remain in place if the majorities change, and given the arbitrariness of endogenous policy rankings. Other governments know that, and thus no country will specialize accordingly. In the most extreme scenario, we can imagine the case that everybody adopts free trade, but nobody specializes to the largest possible degree, because nobody trusts the sustainability of the policy. In a nutshell, unilateral liberalization is a 'no trust' regime because unilateral liberalization does not create sufficient conditions for the trustworthiness of the policy.[14]

We thus argue that mutual recognition is the only way to turn free trade into a sustainable regime. However, it requires a medium, and this is provided by *seeing international market access as a 'right'*. It is the mutual exchange of such rights which establishes mutual recognition (following Herrmann-Pillath 2006a, 2008; for related arguments, see Hillman and Moser 1996; Bagwell and Staiger 2001).

First of all, this step is simple. If market access is seen as a 'right', unilateral liberalization means to extend this right to all other countries without any compensation. On the contrary, mutual recognition would imply that the different liberalization measures are taken in a reciprocal way – that is, rights are exchanged. In this scenario, future restrictions on market access can be seen as revoking the rights given to others, such that the others can also revoke their

rights, as response to the violation of the agreement and a retaliatory punishment. This is the simplest way to theoretically grasp the essential features of the modern system of international trade policy: international trade negotiations are about the exchange of market access rights (MARs), and enforcement mechanisms build on mutual surveillance and retaliatory punishments conducted by the parties themselves (Hoekman and Kostecki 2001: 31ff.).

It is important to realize the profound shift in viewing trade policy issues by considering trade-restricting institutions as trade-enabling institutions: MARs are trade-restricting institutions because in principle they can be revoked or shaped in a particular way, as rights in general, which define borderlines between permissible and non-permissible actions; but, at the same time, without rights and the exchange of rights, international trade policy cannot move towards credible states of 'freer trade', and this also makes MARs trade-enabling. To radicalize the thesis in a dialectical way: *MARs are trade-enabling because they are trade-restricting.*

If we look closer, it turns out that we also need to consider the implications for domestic political economy. There is another paradox here: unilateral liberalization causes externalities on political competition in other countries. In these countries, exporters will gain economically and therefore will strengthen their impact on domestic policies. There is an economic mechanism that fosters their demand for unilateral liberalization of their own country: tariffs reduce imports and hence the domestic demand for foreign currency, which tends to appreciate the domestic currency and hence deteriorates the competitive advantage of exporters. However, the previous arguments about incentives for political lobbyism now apply: the exchange rate effects of tariffs spread across the entire economy, whereas the tariff directly benefits import-competing industries. Therefore, the latter will prevail over the former in terms of mobilizing resources for their interests. Then, establishing an exchange of MARs means internalizing the externality of the unilateral liberalization. As a result, exporters perceive more direct incentives to lobby in favour of domestic liberalization. Whereas the policy of unilateral liberalization can be undermined by domestic lobbying of import-competing industries, the exchange of MARs sets the incentives for domestic exporters to support domestic liberalization in exchange for the opening up of their foreign markets. This liberalization then also produces benefits for domestic consumers, who, however, fail to perceive incentives for mobilizing political support for lowering protection.

We thus arrive at a Hegelian transformation of international political economy: free trade is possible if there are institutional arrangements of MARs and exchange of MARs which enable governments to commit themselves to this policy. This applies with a vengeance once we consider trade policy among democratic countries. Our perspective is essential in substantiating the notion of 'freedom' in international trade. Basically, one could argue that free trade is a state that also expresses individual freedom in conducting economic transactions on a global scale; this corresponds to a Kantian view on international relations, as we have seen previously. However, from a Hegelian standpoint the international

domain does not manifest a global civil society, and hence these individual freedoms cannot be secured and developed on their own; they need intermediation from governments representing the individuals. Hence, free trade can only be realized in a process that operates on the levels of both domestic politics *and* international negotiations. The problem is that one needs to reconcile international negotiations with domestic politics. This connection is mediated by the MARs.

MARs are complex, and this has to be reflected in the complexity of international trade policy.[15] So, the fact that institutions for market transactions in international trade become more complex is accompanied by the growing complexity of the institutions governing the exchange of MARs. The relationship between the levels is also quite arcane. In particular, reducing complexity on the market level may only be possible by increasing complexity on the level of MARs exchange where the endogenous constitution of international trade takes place (Herrmann-Pillath 2006b).

Trade policy as mutual exchange of market access rights: the constitution of international trade

Let us summarize the previous discussion in terms of a Hegelian approach to international trade policies. The core idea is that free trade is not a regime that can be adopted by means of individual decisions of countries because they are not able to commit themselves to their policy in a credible way, thus dampening the incentives for other countries to specialize according to the free trade regime. Therefore, free trade is only made possible by trade-enabling institutions which also constrain trade because they define mutual rights and obligations. So, free trade cannot be naively identified with a 'natural state' of unconstrained trading. This is an insight that inherits the spirit of Hegel's political philosophy: the idea of free trade is only meaningful in a world with strong institutional commitments and constraints.

These commitments are created in a process of mutual recognition. The real-world setting in which this is realized is the trade policy negotiation framework established by the World Trade Organization. This framework has a number of features which enable mutual recognition by allowing for movements towards 'freer' trade in the sense of realization-focused comparisons. Hence, real-world trade policy does not seem to be a deviation from 'rational' principles of trade policy, as standard theory would suggest (e.g. Krugman 1997); in fact, endogenous valuations of rights to trade are enabled, and therefore also are the emergence of viable and sustainable trade institutions in the process of mutual recognition mediated through the exchange of MARs. Two important aspects are worth mentioning here: the conjunction of reciprocity and the Most-Favoured-Nation (MFN) principle in the policy process, and the role of exceptions and the design of sanctions.

The MFN means that countries have to extend all trade privileges that they extend bilaterally to all other countries. This creates a positive externality in the

exchange of MARs by design (Ethier 2004). That would trigger a free-rider effect in a multilateral liberalization process, and so the question of why countries should be incentivized to produce this externality arises. On the other hand, the MFN has to be seen in conjunction with the principle of reciprocity that applies in the negotiation process (overview in Hoekman and Kostecki 2001: Chapter 4). For example, when a country accedes to the WTO, a series of bilateral agreements takes place which follow reciprocal principles. Then, the parties with the strongest motivation to reach a particular agreement in a particular industry or product group will implement the negotiations, thus contributing to the public good of creating trade liberalization. One can argue that this is a specific way to conduct realization-focused comparisons based on the principle of 'individualism', which is understood here as the sovereign interests of the countries. In these comparisons, those member countries which have strong assessments of possible improvements conduct pertinent negotiations, and all others are free to join or give opinions. Once an agreement is reached, it is generalized in the MFN process.

A far-reaching issue in analysing international trade policy is the relationship between MFN and reciprocity. Often, reciprocity is interpreted as a mere technical device to organize the negotiation process and to set incentives for launching and sustaining this process (for instance, Jackson 1997: 59). In our perspective, however, reciprocity seems to embody the more fundamental process of mutual recognition, whereas the MFN is a technical aspect of managing externalities in the institutional process. This view becomes more significant when we pay attention to the fact that the multilateral institutions are also membership-based. Thus, we can argue that reciprocity underlies the principles that guide the identity formation of members in terms of belonging to a community that comes into being and is sustained by mutual recognition. Then, reciprocity is a key phenomenon in establishing the Hegelian framework for international trade policy. This view on the community of trading nations is appropriate to an understanding of the increasing complexity of membership-based institutions in international trade.

One of the most conspicuous phenomena in the evolution of the international trade system is the ubiquity of preferential trading agreements (PTAs; for a recent comprehensive overview on theory and empirical evidence, see WTO 2011). One can say that, so far, global trade liberalization operates in tandem between the regional and the multilateral process, with the latter currently stuck in a negotiating stalemate in the Doha round. One possible explanation for this is the fact that with the growing complexity of the trade institutions, multilateral assessments of improvements become more complicated. This is especially true for all kinds of trade barriers that involve domestic regulations, such as in services. In this context, one can argue that liberalization can be achieved with lower negotiation costs if countries which share more similarities, such as convergent interests and convergent regulations and legal regimes, move forward together. That means that in PTAs, the shared identities of countries may be more pronounced (Herrmann-Pillath 2006c). However, there is an important difference between the multilateral process and the regional process, namely that the

multilateral system basically balances the relative power positions of countries (Maggi 1999): in trade negotiations, the relative size of a country matters in determining the interest to step into the process, but in the voting rules size does not matter, with one country having one vote. In comparison, in regional agreements there are no constraints on the exercise of power resulting from size. On the other hand, this can be seen as an additional incentive to create regional blocs that balance the distribution of power by creating larger units within the negotiation process (Mansfield and Reinhardt 2003).

So, one of the most important exceptions in the international trade system can be interpreted as a response to complexity (Herrmann-Pillath 2006a). On the one hand, we have a distinction between the domestic policy process, in which consent to certain institutions is created, and the international trade relations governed by those institutions. On the other hand, in considering these institutions, we need to distinguish between two levels: the level of institutions that governs trade transactions directly (such as tariffs), and the level of institutions that guides the exchange of MARs (such as the rules governing the use of tariffs as a policy instrument). Regionalism as a part of the multilateral process is an institution on the second level, and as such concerns the constitution of international trade. Thus, *regionalism* is a reflection of the constitutional principle of *reciprocity*. This does not imply that all regional agreements actually succeed in solving complexity issues (for a sceptical view, see Krishna 2012; for a more upbeat view that focuses on incentives for specific investments within PTAs, see Anderson and Yotov 2011). In the real world, PTAs are motivated by the many different interests of the involved actors, and there is much scope for failed policy initiatives. However, our claim is that, in the long run, those combinations of the multilateral and the regional process which allow for aggregate reductions of political transaction costs through multiple 'identities' of the member countries will be viable and sustainable. The multilateral and the regional process are convergent ways to mediate mutual recognition.

Against the background of our general analysis of associations in Chapter 4, we argue that regionalism in the world economy is a manifestation of the associational principle. This can be further vindicated if we identify a general principle in the evolution of the international trade policy that corresponds to the principle of reciprocity. This is the principle of constraining negative externalities (this is a cornerstone of the approach by Bagwell and Staiger 2002). In the context of regionalism, this refers to the tension between trade creation and trade diversion. The multilateral rules of the WTO establish that a PTA should liberalize 'almost all' internal trade, which would suggest that trade creation prevails over trade diversion. The most important kind is the terms-of-trade (ToT) externality: large countries can impose a negative ToT externality by adopting protectionist measures if they reduce their import demand in the world market. This also applies for PTAs, so another important rule is that PTAs should not increase the level of protectionism relative to the pre-agreement status. The MFN principle is another way to internalize externalities on the level of trade institutions, though it creates the aforementioned positive externalities on the constitutional level by extending

commitments to countries that did not offer reciprocity. This is because the automatic extension of liberalization measures means that there can be no ToT effects resulting from conditional agreements that would effectively create preferences among members of that agreement. This means that regionalism can only work as a constitutional rule if it is embedded into multilateralism as it stands, since over time trade preferences would be eroded by the MFN principles, if regional trading agreements expand further.

There is a range of other phenomena related to exceptions that reflect the principle of reciprocity and reveal further insights into the mechanism of realization-focused comparisons, such as the safeguard mechanism or the arrangements governing retaliation as a sanctioning measure. The latter are especially interesting because, on first sight, they violate the principles of reciprocity: for example, in anti-dumping procedures countries are allowed to impose retaliatory tariffs in industries other than the disputed ones. However, these and other observations show that what matters is the establishment of connections between the international and the domestic domains in terms of valuations of policies (Sykes 1996). Domestic politico-economic valuations are actually fed into the multilateral process. In fact, we can view most exceptions in the multilateral regime as ways to enable the possibility of renegotiation (for a related view, see Finger 1999; Bagwell and Staiger 2002: 97ff.).

The reason for this is twofold. On the one hand, in the moment when a trade agreement is reached, all parties are aware that this needs to be stabilized by a domestic political agreement. In spite of the fact that agreements can be supported by international law, there is no ultimate authority that can enforce these agreements. So, there is always the possibility that agreements are undermined and rescinded because of shifting domestic political landscapes. On the constitutional level there are a number of rules that allow for adaptation to these circumstances. On the other hand, international trade is highly dynamic. New competitors emerge, which means that mutual evaluations of the domestic costs and benefits of free trade are also subject to continual change (Irwin and O'Rourke 2011). Hence, there are internal and external reasons why the sustainability of multilateral commitments without enforcement may require adaptation of the agreements. However, this adaptation has to obey the principles of reciprocity.

Then, reciprocity would imply that it is not just economic values that need to be balanced, but also politico-economic valuations in terms of the perceived domestic costs and benefits. Governmental ability to compare and appreciate the different domestic politico-economic valuations of MARs and related trade policies is an important aspect of mutual recognition in international trade. This amounts to adopting the position of an 'Impartial Spectator': mutual recognition would imply that the different governments are enabled to adopt the perspectives of others in relation to domestic political support. This allows for establishing a peculiar notion of 'fairness' in international trade which relates to the principle of 'first difference reciprocity' (Bhagwati 2002): 'Fairness' is not necessarily reflected in enforcing a 'level playing field' in terms of applying the same

institutions to all countries, but to design institutions that equalize politico-economic valuations through the mutual recognition of constellations in domestic politics. This idea characterizes the aim of the multilateral system, which is simply the attempt to design a process of trade liberalization that also recognizes the reality of democratic politics.

In the case of tariffs, this principle is most straightforward to observe: reciprocity does not imply that all countries adopt the same tariff rate, but that they exchange concessions that seem to be equally costly in terms of domestic politico-economic valuations, thus generating a diverse system of global tariffs. In our perspective, this must also apply for trade institutions in general. From that point of view, the Uruguay round led to an important deviation from the principles of fairness because it partially imposed identical institutions upon all countries, such as in the area of intellectual property rights (TRIPS) (Finger 2000).

The costs and benefits of trade policies ultimately accrue to different interest groups and find expression in political support for different political forces. Reciprocity in the international trade system requires that these politico-economic valuations are communicated and balanced. Drawing on this, we conclude that all trade policy measures can also be devices to communicate valuations in a credible way among countries, and that in the actual procedures, reciprocity must apply. Both ideas reflect the dynamics of mutual recognition: this is not achieved if a certain institution is simply enforced from a transcendental point of view. This perspective explains a number of puzzles in the practices of the international trade system.[16]

To summarize, we can approach international trade policy in an entirely new way, which is to interpret it as a process of deliberation. Deliberation means that all trade policy measures have to be seen in bimodal terms: on the one hand, they directly affect trade; on the other hand, they are signals on the level of MARs exchange. This bimodality theorem is one of the core claims of the Hegelian approach to international trade.[17]

In the international context, trade-enabling institutions have three main functions on the constitutional level which associate it with the level of markets:

- enabling credible communication and commitments in such a way that domestic and international political transactions are connected and made commensurable;
- internalizing negative externalities or making positive externalities sustainable by means of solving the corresponding incentive problems;
- establishing equality in terms of relative power positions in the ongoing process of negotiating and re-negotiating trade institutions.

These three functions cannot be evaluated from the transcendental perspective of an external observer. In realization-focused comparisons, only the immanent and endogenous valuations of participant observers count. Fairness and justice in trade policies means that all observers are on track for adopting positions of

'impartiality'. Impartiality does not imply that trade institutions have to be homogenous, because what counts is the mutual recognition of reasons for particular trade policies. If good reasons are mutually recognized, unequal institutions such as different tariffs would no longer be seen as deviations from a transcendental criterion of efficiency and welfare.

In this approach, interest group politics is essential because this is the only way that societal preferences over different institutions can be articulated or even discovered (for a related view on democratic processes in general, see Wittman 1995). However, the classical dilemma remains relevant, namely that depending upon the political transaction costs, a broad range of potential interests may not find expression. Therefore, an essential condition for the process is that the *public discourse* in different societies is open and features low barriers to access.

One particularly interesting problem is the case of *consumers* as a most encompassing group. Traditionally, trade policy is producer-biased because market access remains central (Hillman and Moser 1996; Tangermann and Josling 2001). At first sight, this perspective is maintained and even reinforced in the emphasis on rights and reciprocity we derived from Hegel, because this still refers to market access which is primarily a producer interest. But how do consumer interests come into play?

The first obvious argument is that economists defending the traditional view on free trade are representatives of consumer interests. More generally, science should provide a common good perspective, comparable to environmental policies, where future generations are lacking representation in the current policy process. However, consumers would not necessarily represent the common good by themselves, because ultimately they are consumers only in a particular sense, i.e. consumers of particular kinds of goods. So, the question is whether consumers, similar to producers, can organize themselves by forming communities of shared economic action.

One example wherein this partially happens is in the context of agricultural trade, where consumer concerns about food safety have recently gained importance. In this area, there are consumers who might express particular preferences – for example, for organically grown food products – and who might also organize their preferences in the context of specific organizations, such as 'Foodwatch'. This is clearly an interest group, as the preference is not shared by everybody. Traditional trade policy faces serious difficulties in coping with these phenomena. Therefore, we think that this is an excellent area for the application and further development of the Hegelian approach to international trade.

The case of genetically modified organisms: deliberative trade policy in action

We now turn to our case study – genetically modified organisms (GMO) – which is an excellent illustration of the complexity issue in international trade (Perdikis *et al.* 2001). The GMO issue links at least three highly dynamic spheres of international economic relations: agriculture, one of the most problematic traditional

domains in international trade policy; intellectual property rights; and consumer concerns.

The GMO issue is currently shaped by a clash between two different approaches towards new technologies, the US American one and the European one, which also reflects two different views on the welfare effects of new technologies, and the role of scientific knowledge in society and politics (Stewart 2009; Clark 2013). This has direct implications for the role of risk assessments in determining the approval and standardization of new technologies. The European approach champions the precautionary principle and emphasizes the role of consumer concerns. The American approach favours risk analysis and puts producers' interests in the forefront. Internationally, the American approach has been enshrined in important agreements and institutions, in particular in the shape of 'product based' criteria in assessing the nature and intention of barriers to trade. This means that there are tight constraints on considering processes and production methods (PPM) as a criterion for limiting market access for products as long as there is no proof of any harmful effects of those products. What are the issues at stake?

First, GMO technology offers great prospects in raising agricultural productivity and also in improving the nutritional value of food (Quaim 2009). So far, science has not discovered or confirmed any direct negative impact of GMO on human health. However, as we know from history, this does not mean that hazards do not exist. Most risk assessments are now mainly based on direct health effects and do not include possible long-term ecological consequences. In particular, the product-based North-American approval procedures do not currently include tests for ecological or indirect effects of GMO and focus only on direct hazards for human and plant health (see the survey in Meyer 2012). This means that GMO issues involve the problem of strong uncertainty in the sense that knowledge might be lacking about what could be known – that is, potential unawareness of ignorance (compare Cooney and Lang 2007).

Second, GMO technology is received differently in different countries. Especially in Europe, many consumers reject GMO in human food and show strong concerns about its ecological effects. Internationally, the situation varies widely and is not stable because public opinion is easily influenced by salient events, especially in the context of food. The current EU system was shaped by the events of the 1990s, especially those surrounding the outbreak of 'mad cow disease'. Public opinion and the media play a decisive role in shaping policies (Vigiani and Olper 2012); this is true even in autocratic countries such as China, where a series of food scandals have erupted in the past.

Third, consumer concerns could be met by imposing strict regulations on planting, distributing and processing GMO. However, this requires complex systems of labelling and controlling GMO throughout the entire production chain, as long as there is no complete prohibition of GMO. In particular, the coexistence of GMO and non-GMO crops creates problems, in particular where biological agriculture is concerned. These problems are not fully resolved in the EU, where a centralized system of testing and approving GMO has been

installed, while regulations of cultivation are still decentralized, though being gradually usurped by the European Commission (Etty 2009).

Fourth, GMO involves difficult issues in terms of intellectual property rights (IPR). Given the biased reception of GMO in the world, there are clear gaps in developing the pertinent industries, which means that most patents belong to US multinational companies. Farmers are therefore confronted by measures for protecting IPR because the companies constrain the free use of seeds. Therefore, GMO management interferes with the management of natural production processes in the context of farming in very different socio-economic contexts, reaching from large-scale industrialized agriculture to small-scale peasant farming in developing countries. The distribution of the welfare effects of GMO use is mainly determined by the strength of the IPR regime: the stronger the IPR enforcement, the lower the benefits to the farmers (Quaim 2009).

Finally, GMO regulations have a direct impact upon international trade because domestic approvals limit the accessibility of markets, and because events that involve contamination of non-GMO exports by GMO can trigger serious responses by regulatory authorities, especially in the EU (for a case study, see Viju *et al.* 2011). Beyond this direct impact, there are strong externalities in different senses. Regulatory differences can influence the quality of GMO and hence lead to divergent assessments of risks, which might lead to spillovers across countries, such as when US authorities adopted the product-based approach and European authorities included the ecological aspects (Meyer 2012). Further, there are externalities that are caused by the market power of agricultural importers which may imply the imposition of regulatory standards on other countries independent from their policy preferences, both on the side of the government and of the general population. In fact, GMO regulations also affect trade in non-GMO products (Vigiani *et al.* 2009).

The GMO issue is an excellent illustration of the increasing complexity of MARs in the modern trade system (compare Gupta 2010). GMO regulations and events ultimately coalesce into determinants of costs of trade, with an additional degree of uncertainty, such as when unexpected discoveries of GMO contamination trigger the redirection of trade flows (Viju *et al.* 2011). Yet, the causal patterns behind these effects are highly complicated and involve various interactions between national politics, government measures and international relations (Young 2011). As in the case of services, MARs are not simply shaped by border measures, but also by national regulations, so that foreign trade and the domestic economy cannot be treated separately in regulatory terms. In addition, there is a high degree of mistrust between governments relating to the true intentions of certain regulatory practices, because the GMO issue is part and parcel of the agricultural regulatory regimes which form the most serious bone of contention in the Doha round. Major GMO users are also major agricultural exporters who articulate broader concerns about the limited market access which results from EU agricultural policies, and who claim that European policies towards GMO are, in fact, disguised protectionism (Jackson and Anderson 2005).

Let us note that the GMO issue establishes linkages between the two 'natures' in a very explicit way, because GMO are artificially constructed natural beings, the status of which is defined according to legal terms. The latter also applies for 'natural' beings, which is important in the context of GM animals: in Western societies there are increasing concerns about animal welfare, and even the legal status of animals as 'persons', which raises new and serious ethical issues with regard to manipulating them, independent from the use of biotechnology (Vàzquez-Salat *et al.* 2012). This issue is less sensitive in the case of plants, on which we concentrate our discussion.[18]

The use and the spread of GMO can be seen as a performative process along the lines of our arguments in Chapter 2. In fact, the different regulations on the national and the international levels establish a social ontology of GMO (Bonneuil and Levidow 2011). This ontology encompasses definitions of the borderline between nature and technology: the product-based approach to regulation treats non-GMO and GMO as being in basically the same categories because the focus is only on functions relative to selected parts of the environment, such as the human body (compare the general discussion of natural and technological functions in Perlman 2009). In comparison, most ecological approaches also emphasize the difference between 'manufactured' and 'natural' organisms, even though in principle the functional aspects are also covered. This is reflected in clear societal differences in how this issue is managed by the pertinent organizations and how it is treated in the public discourse. In the past decade, the most influential difference was that which was apparent between the regulatory approaches in Europe and the US, pointing at different contexts in the treatment and public acceptance of scientific results.[19]

Following the long tradition of large-scale industrialized agriculture in the US, for a long time GMO were seen as a part of 'nature' which was shaped by other means of human intervention. This view differs from the European one, which increasingly perceived agriculture as a part of 'nature' independent from human intervention, especially in the context of the green movement and the spread of organic production technologies. The association between farming and 'nature' plays a much bigger role in European popular culture, such as in the context of self-perceptions of regional identities in France and Germany; this association has been reinforced by the rise of environmental concerns in the general public, but also in the context of managing the European agricultural economies under the general prescription of 'greening'. This is backed by policy notions of the 'multifunctionality' of agriculture that justify European agricultural policies in the context of international trade negotiations (Jackson and Anderson 2005). Therefore, there is a partial convergence between certain policy institutions and public opinion in approaching GMO in the broader context of agriculture as an economic activity that is especially responsible towards 'nature', in spite of the fact that many European farming activities make intensive use of technology, especially in small countries such as the Netherlands or Denmark.

So, we can say that GMO are 'performed' differently in the US and the EU, by the interaction of perceptions and activities involving producers, consumers

and regulatory authorities. The performativity of regulatory regimes is reflected in their physical consequences: consider the free release of GMO into the environment; as a result, the borderline between 'nature' and 'manufactured organism' would necessarily blur, with the effect that there would no longer be a need for specific regulation of GMO production. In other words, the regulation of this production and trade is essential to create and maintain the difference between the 'natural' and the 'artificial'. This implies that *the borderline itself cannot be drawn by 'objective' criteria, but is performative* (compare Perlman 2009). On the other hand, the separation of GMO and non-GMO would be maintained as a legal category in the context of the patent regime, thus triggering specific private sector actions. The patent regime, independent from the question of diffusion, can retain the distinction between the 'artificial' and the 'natural' because the criterion is reference to certain human actions (and not to intrinsic properties of the products). Then, there is much scope for performative divergence across countries, which leads to remarkably different business dynamics, with the US being the lead country in GMO production and use, and the EU lagging behind despite the fact that the EU is otherwise also a leader in biotechnology. This difference is manifest in the increasing tendency of European biotech companies to relocate partly to the US, thus further enhancing this dynamic.[20]

Now, the use of GMO can create substantial domestic and international externalities, which are mostly related to regulatory differences in relation to the physical limitations of controlling the use and distribution of GMO. These externalities are central to the Hegelian analysis of the issue, because this leads to the questions of how far externalities can be internalized and which externalities are possibly desirable ones in order to keep the system going. As we have seen, in the mainstream approach to international trade, only ToT externalities matter for analysing trade policy; on the other hand, the externalities in question do not correspond to those treated in environmental economics approaches to international trade, as there are normally no concerns about direct cross-border contamination of non-GMO crops by GMO crops. The externalities discussed here are mainly mediated by consumer perceptions of direct welfare effects and regulatory spillovers.

Domestically, externalities mainly occur in two areas: the issue of co-existence and the issue of labelling. 'Co-existence' refers to the physical proximity of non-GMO and GMO crops, thus creating the possibility of cross-contamination; 'labelling' refers to the provision of information about GMO content in consumer products. Labelling is important when there are strong consumer concerns about GMO in food products, so they demand full transparency of GMO use in consumer products. Consumers might feel generally concerned about the ecological consequences of GMO, which would imply that they also feel negatively affected by GMO production and consumption by others. These considerations can be compared to moral indignation over certain behaviours of others or violations of religious feelings (Davies 2007). They are mostly expressed in the context of GMO activities and regional mobilization in

creating 'GMO-free zones'. The channels operative here are mainly political ones, such as political parties and elections, resulting in distinct differences across the European Union, both nationally and regionally, in terms of the degree to which GMO approval and use is constrained (Poli 2010). This is the relation between consumer concerns and the co-existence issue. The other element is consumer concerns about the direct consumption of GMO. In this case, labelling could possibly help separate GMO uses according to diverse consumer preferences, as in the case of organically grown agriculture in general. However, labelling requires full-scale tracking technologies which can verify the information on the label. The sources of error here are uncontrolled mixing of products and co-existence resulting in the natural contamination of GMO-free crops with GMO seeds (compare Melser and Robertson 2005).

How are these different externalities actually determined? In the case of GMO, there is a gap between the general perceptions of consumers and mainstream scientific opinion. Science, as already indicated above, has not yet presented conclusive proof of any negative impact from GMO on either human health or the environment (although there are several reports about potential hazards, mainly from domestic labs in countries which raise strong concerns about GMO). However, given the uncertainties surrounding the current state of scientific knowledge this does not justify over-riding consumer concerns in democratic societies. These concerns have different justifications which can be grouped into several kinds of argument.

The precautionary argument implies the necessary incompleteness of the current scientific research. Another reason given here is that consumers have distinct views on the relationship between humans and 'nature' and have a preference for 'natural' food, hence expressing an ordinary diversity of tastes and predilections that could be possibly treated by regular approaches to business and marketing. There are also moral and religious reasons which refer to human 'fiddling with nature'. The very definition and application of the term 'externality' depends on these differences and hence becomes performative in this context. Correspondingly, internalization measures differ in the extent and design of the involvement of business and regulatory authorities.

On the international level, we meet the same distinctions as far as the direct impact of international trade of GMO and associated products is concerned. For example, the exporter of a food item containing GM maize would have to heed consumer preferences and regulatory authorities. However, there is a distinct additional impact of differences upon regulatory approaches. For example, a labelling requirement that involves checking for co-existence regulations could be very costly or even impossible to fulfil if the country of export does not have corresponding regulations. In this case, meeting consumer preferences in the import country would require setting up a wholesale GMO-free production chain in the exporting country independent from domestic regulatory requirements.

As this discussion shows, there is now an additional kind of externality, which is the external effect of regulatory differences (Vigiani *et al.* 2009). This is the major reason why international trade policy becomes involved (Gupta

2010). Regulatory differences may cause adaptive pressures across countries (depending on relative market power and political clout) and create trade barriers. This was already evident from the previous discussion. The exporters in the country with a low-key regulatory regime would have to incur high fixed costs for market entry into the country with the more restrictive regulatory regime, which increases trade costs and hence operates as trade barrier. There is a difference in whether such barriers emerge from consumer preferences or are an immediate consequence of regulation. In the latter case, the trade barriers can be subject to WTO scrutiny if a complaint is made by the exporting country. This is different from the first scenario, where the exporters adapt to the regulatory regime of the importing country, and hence do not file a complaint with the WTO, which can be compared to the adaptive responses to mere threats of anti-dumping measures (Blonigen and Bown 2003).[21]

In the context of international trade it is necessary to cross-nationally evaluate different consumer concerns. This refers both to the content of the concerns and the risk attitudes. With regard to content, differences in general preferences on GMO-related consumption count; with regard to risk, even with the same preferences there can be various weighting attitudes. In order to contain externalities that result from international trade in GMO, there is a need to establish certain forms of international policy coordination and conflict resolution. So far, conflict resolution takes place in the WTO. The WTO dispute settlement procedure is case-driven and is only triggered by explicit complaints from countries about specific trade issues. This also implies that the decisions taken by the formal WTO dispute resolution process limit the impact of regulatory conflicts to the specific issues raised. In particular, there is a distinction between the decisions of the panels and the Appellate body. Only decisions by the Appellate body are actually embodied in international regulatory standards, because without them appeals in different (though related) contexts are always possible.

Beyond the WTO, policy coordination takes place in international organizations. In the context of GMO, these are the Codex Alimentarius and the Carthagena Protocol, which is managed by a pertinent UN organization. The WTO mainly refers to the former in adopting GMO-related disputes, because the latter has not been ratified by important countries, in particular the US. The reason for this dissociation lies in the fact that the EU was successful in incorporating the precautionary approach into the Carthagena protocol, which is rejected by the US. So far, the Codex adopts scientific risk assessment procedures, which are recognized internationally, even by the European authorities, in particular the European Food Safety Authority (EFSA). These differences are responsible for complicating the regulation of GMO trade internationally.

The major issue in our context is that the problem of regulatory differences is mainly caused by distinct constitutions of civil societies delineated by political borders. Let us again use the EU/US comparison. Trade disputes mainly refer to the trade barriers generated by regulatory differences. The EU regulations clearly stipulate higher costs for market access for American producers and exporters. One contentious issue is whether these barriers represent agrarian protectionism

or whether there is a reason for the regulatory differences that can be recognized also by the US. In the context of the WTO, issues like this are resolved in dispute resolution procedures which involve highly technical issues of multilateral trade agreements. Again, an important feature of these decisions relates to the performativity of GMO.[22]

Drawing on the above discussion, what approach to trade in GMO can we propose? The first observation is that the current regime clearly shows how consumer concerns have become significant in international trade policy. It is no longer sufficient to point at general increases of consumer welfare in terms of aggregate gains; consumer welfare is increasingly defined in terms of specific civil society concerns about ecology, ethics or lifestyles. There is *a need for more intensive international coordination of preferences* within global civil society activities. In fact, this is already intensifying in many areas of international trade policy, as well as via other UN organizations where civil society representation is rapidly evolving. The question is whether and how cultural and societal diversity in consumer preferences can be dealt with in the context of global civil society organizations. This would launch a multidimensional process of policy coordination that involves government actors and international NGOs.

Another important question is that of the role of science. This is most evident in other areas such as climate change and policies. There is a need to install channels of communication between science, political authorities and civil society representatives regarding decisive issues that involve science, uncertainty and ethics. Basically, the Sanitary and Phytosanitary Standards (SPS) agreement seems to suggest that established scientific evidence is an objective standard for evaluating the supposedly hidden intentions of a policy. In other words, independent from the beliefs about a policy, science would serve as a benchmark to identify a 'protectionist' intention based on considering the effects of a policy. However, this approach cannot be vindicated.

First of all, moral or religious reasons cannot be judged on scientific terms, unless human freedom in expressing personality is severely curtailed. However, once individual beliefs have negative effects upon others, this is where externalities come into play again: for example, can the European position be maintained if it turns out to be a minority position globally, or if even within the enlarged EU, consumer concerns differ widely? This is where Hegelian thinking comes into play with a vengeance. Davies (2007) has argued that what matters are not differences in content or attitudes, but the moral quality of the reasons offered for why risks involved with GMO should be accepted or rejected.

There is an important implication of this view: moral judgments are assigned different roles depending on whether the SPS or the Technical Barriers to Trade (TBT) agreement is taken as the frame of reference. The TBT agreement allows for the consideration of moral reasons to limit international trade which relate to public opinion. Now, as Davies (2007) elaborates, the morality issue in the context of GMO might not relate to GMO as such, but to the question of taking risks to an immoral extent. For example, under the auspices of the TBT agreement, the WTO Appellate Body judged US restrictions on online gambling via

offshore websites as legitimate. These can only be justified in terms of public morals, since otherwise individuals may enjoy the freedoms of consumer sovereignty. Correspondingly, we might argue that risk-taking in GMO is violating public perceptions of ethically responsible risk-taking, such that import restrictions can be justified under the TBT. Therefore, a specific conclusion drawn from our perspective is that the TBT agreement should be the appropriate framework for adjudicating GMO-related trade disputes by the WTO.

The problem with this argument is that it does not refer to cross-culturally binding standards of morality. These have to be rejected from an original Hegelian standpoint, which emphasizes locally bounded forms of ethical life, yet the method of realization-focused comparisons offers some venues for a solution along the lines of risk-taking. Adopting GMO creates risks of environmental hazards and threats to human health; not adopting GMO increases the risks of safeguarding the world food supply in the future, and may enhance environmental risks from intensive agriculture (Stewart 2009). We thus encounter a moral problem of risk assessments on two levels: one is the morality of risk-taking in those two dimensions, and the other is the comparative assessment of these. This is the problem of risk–risk comparisons, which is above all a moral issue: how far is it justified to give more weight to moral reasoning about risk-taking in the environmental context than to world food supply? Dilemmas such as these are a major reason why international coordination at the UN level becomes increasingly complicated because different agencies specialize in different aspects and, correspondingly, NGO activity is distributed unequally and also partially reflects these concerns. For example, environmental NGOs may be less worried about food supply and vice versa.

Another reason why the SPS criteria cannot apply is our ignorance about future scientific knowledge. In the context of the SPS, the only existing WTO case shows that the panel also operates as a group which defines certain standards of science, while avoiding almost any statements on scientific judgment of risks. Thus, dealing with uncertainty is reduced to what is an eminently social-constructivist process (for details, see Bonneuil and Levidow 2011). For example, the selection of experts depends on a screening procedure by all involved parties, such that the 'established scientific opinion' is only the result of voices of experts who did not meet with a veto of any of the parties, following principles of consensus.[23]

Our view partly accords with the panel approach in suggesting that a mutual assessment of reasons given for certain policy actions is necessary. As is evident from the panel decision, this is problematic because two different levels are involved: one is the evaluation of reasons given, the other is the evaluation of the reasoning. In the EU case, a decisive criticism concerned the second level, which is why even experts dissenting on the GMO issue could agree on diagnosing the insufficiency of the EU moratorium decision. Yet, the problem remains that precautionary attitudes would also partly rely on different forms of reasoning, such as referring to uncertainty as a fact that cannot be proven because we do not know what we do not know. A solution may rely, for example, on

assessing levels of effort. The key criterion would then be whether a government that restricts GMO on the basis of 'mere' precaution without sufficient reasons continues to invest effort in enhancing the scientific basis for its decisions. Thus, what would be necessary is evidence of continuing research and responsible evaluation within reasonable periods of time (see the discussion in Perez 2007).

The Hegelian remedy to these problems involves the need to establish international arenas of political and scientific deliberation. For example, if the EU invited US agencies to become observers, advisors or even collaborators in the EU risk assessment procedure, that would not only increase transparency but also allow shifting the presentation and evaluation of different reasons to the pre-conflict stage. The challenge is to mutually recognize reasons while maintaining regulatory differences and hence the possibility of expressing different attitudes towards risk and uncertainty. In the EU/US case, this requirement is even more salient because there are shared opinions and interests between EU organizations and the US side, such that the Commission navigates in difficult waters in its relations with national governments that immediately face the consumers' and voters' concerns. An effect of the panel decision was a tendency to decentralize the approval process, thus adding further complexity (Poli 2010).

The current tension between the WTO practices defined by the first panel decision and the UN approach in general needs to be resolved, because it represents the clash between the US and the EU views. The central problem is to achieve convergence in attitudes and approaches towards risk. Trade barriers reflect divergent frames of public policy and public opinion. Conceptually, Clark (2013) proposed a 'third way' of 'precaution through experience risk frame' which accepts the US emphasis on evidence-based risk assessment, but opens up the arena to include non-scientific experts. This includes the previously outlined deliberative mechanism. In concrete terms, that would require the establishment of a convergent basis for Codex Alimentarius and the Carthagena Protocol.

Finally, recent renewed efforts to establish a transatlantic free trade area would certainly create a setting in which the two major players – the US and the EU – would need to establish regulatory convergence to a certain degree that would automatically set a precedent for global convergence, because the tensions between the two regulatory approaches cause the most extensive regulatory externalities on the global scale, so that a substantial reduction of these would certainly change political economy constellations worldwide. In this context, the role of global corporations may come to the fore, as these can directly mediate ethical conflicts by reflecting upon their own business approach in the field of GMO. Indeed, in the past companies such as Monsanto also stood in the centre of NGO activities against GMO. Such companies could directly engage in public debates about GMO, beyond their regular investment in lobbying efforts.

To summarize, and to conclude this and the previous subsections, the Hegelian approach to international trade policy gives us an analytical framework for understanding one of the most salient facts about the recent evolution of international trade institutions – that is, their increasing complexity, especially the

complexity of MARs and the constitution-level arrangements that drive their evolution. The standard view mainly perceives this complexity as increasing costs and impediments to the realization of 'free trade'. The Hegelian perspective highlights their trade-enabling role, starting out from the paradoxes of equilibrium thinking about free trade. These paradoxes show that individual commitment to free trade is only possible in relations of mutual recognition between countries, a principle which is enshrined in the role of reciprocity and membership-based agreements on international trade. In this context, the international trade regime involves the exchange of MARs, thus creating the legal framework of trade endogenously.

After World War II the anarchy of international relations was gradually supplanted by the emergence of a global civil society. This marks a difference to Kantian views on the constitution of international trade. Increasingly, in this global civil society both countries and global associations interact in negotiations over the institutions of international trade. In this process, the general idea of 'welfare' as the abstract gains from trade is being substituted by more specific concerns about ethical aspects of trade, in the sense of particular interests and commitments to certain results of trade. Thus, as we have seen, consumer interests emerge as a powerful voice in international trade policy, as opposed to the central role of producers' interests in the traditional approach to trade policy. As we have seen in the example of GMO, international trade is increasingly embedded within an associational structure, such as the organizations that establish standards for labelling or benchmarks for agreeable reasons for justifying certain measures in trade policy, or the different shapes of regional associations of countries, reaching from interest groups to regional trading agreements, or the presence of global NGOs in the policy process of international organizations.

In this context, the notion of 'free trade' has to be considered in terms of the three Hegelian dimensions of personal, moral and social freedom. A core issue linking these three dimensions is the role of externalities on different levels, reaching from terms-of-trade externalities to regulatory spillovers. The example of GMO shows how trade policy issues can only be approached from the Hegelian perspective of totality, because, for example, even the basic notions of how to define the borderline between the 'natural' and the 'artificial' are concerned. Then, free trade is only possible in a universalistic notion of 'ethical life'. In Hegel's original system, this was only conceivable in the context of the nation state. We believe that our approach transcends these limitations by highlighting the role of governments as actors in an emerging global civil society. Then, as we have illustrated by means of the GMO example, it is not sufficient to approach these issues only from the dimension of 'personal freedom', which would simply consider institutional constraints on trade in GMO as limitations to free trade. Global free trade also needs to be considered in terms of moral freedom, thus involving mutual recognition in a moral discourse about the effects of trade in GMO not only upon the environment and health, but also upon the identities of human beings, being themselves parts of communities of lifestyle, religious beliefs and political conviction. However, given the stark

asymmetries in the distribution of power and wealth across the countries in the world, moral freedom can still imply a lack of social freedom in terms of the equal distribution of the capabilities of people and their countries for participation in the deliberative process of international trade policy. So, ultimately 'free trade' is only possible in a tightly integrated global institutional regime which puts intersubjectively achieved justice first and efficiency second.

Notes

1 This approach is based on certain assumptions about the efficiency of capital markets because the values of stocks are considered to incorporate the correct information about the expected future performance of the company as resulting from the present management's decision-making. In the real world, this evaluation is undergirded by the informational infrastructure of capital markets, such as the ongoing work of analysts, financial media and other observers who form a public opinion about the company and its managerial performance. These processes may manifest an endogenous dynamic which does not necessarily lead to the correct processing of information, as has been shown by, among others, the models of 'informational cascades' (Bikhchandani *et al.* 1992, 1998). Yet, this might be regarded as the 'best of all possible worlds', as there is no other way to gain information about a future which is fundamentally uncertain. Therefore, in order to avoid dysfunctions of information processing one should improve the availability and accuracy of information. Here the issue of managerial compensation comes close to the logic of accounting systems briefly discussed in Chapter 3, endnote 35. For example, increasing the frequency of reporting and defining clear rules for evaluating the value of assets is seen as a major advance towards safeguarding the proper functioning of capital markets as a social device to evaluate the future performance of companies. However, as we have seen, this view presupposes that related markets provide sufficient and reliable information about the value of assets, which is particularly problematic in evaluating new technologies and new business models, such as in the case of dotcoms. That is, informational cascades on product markets (such as hype over new kinds of internet-based business models) can trigger cascades on stock markets which directly affect managerial compensation without being related to 'true' individual performance in terms of effort or prudence.

2 It should be noted that in many theoretical models of the principal–agent problem in public corporations (as in Hellwig 2009), risk-neutrality is assumed for all actors. However, this assumption would not match with the preferences as revealed in the behavioural expressions of the individuals. If managers were risk-loving, they would establish independent enterprises which would allow them to obtain the full residual income from their entrepreneurial activities in the firm. In this context, performance-based incentive schemes based on the profitability of the company would partially create owner-like incentives. Managers are thus induced to adopt an owners' identity by changing their risk preferences. A related argument, while maintaining the assumption of their identity as implicated by their risk preferences, is that risk-averse managers will only pick risky projects if offered a risk-premium (risk-loving entrepreneurs would be satisfied with a much lower compensation in terms of residual profits).

3 If investors are entrepreneurs in the sense of treating their assets as objects of entrepreneurial risk-taking, they prefer the company to take higher risks, even if they do not necessarily need to realize super-normal profits (as risk-loving agents, they normally do not expect a risk-premium). If investors are risk-averse, they need to realize a risk-premium in order to be incentivized to hold stocks. This is empirically vindicated in the so-called equity premium puzzle: even in the longer run, equities consistently manifest a higher rate of return than bonds (for a survey, see DeLong and Magin

2009). This equity premium may be explained as a risk-premium. As a result, managers are required to take higher risks, because only this leads to systematically higher returns, and therefore they would need to be appropriately motivated. The literature on the equity premium has not yet produced a generally recognized explanation. The problem is that the premium is too large to be explained only by risk aversion in the rational choice context, because the implicated degree of risk aversion is extremely high. However, if behavioural economics aspects are included, such as loss aversion or bounded rationality, the premium appears to be easier to explain.

4 The emergence of pecuniary incentive systems was in concert with the general trend of 'financialization' (Krippner 2005) and was therefore most pronounced in the context of 'financial capitalism', often distinguished from other versions such as the Continental European or the Japanese ones, where traditionally managerial compensation was less oriented towards the pecuniary dimension and direct incentivization based on the profitability of financial assets invested in the company. In Chapter 3, we have already discussed another aspect of financial capitalism, namely the rise of certain accounting principles (see Perry and Noelke 2006) which, along with modern managerial incentive systems, are based on applying economic theory to the design of legal and corporate structures. It is assumed that monetary valuations can enhance the commensurability of different choices for the opportunity cost principle to be applied with greater transparency and stringency, and that all actors in the economy are rational economic agents in the sense of standard economic theory. This means, for example, that adopting risk-averse investment strategies would be rational for managers, given the existing corporate governance structure, because the time horizon of their employment in the company is uncertain and potentially short-term, especially in the context of risky failures, and because they do not earn a residual income.

5 Beginning with the seminal work of Titmuss (1970), a vast array of research across different disciplines has shown that extrinsic rewards can crowd out intrinsic motivation. In the original Titmuss book, it was reported that donations of blood actually decrease when monetary compensations are offered. An influential meta-analysis of psychological research on the topic (Deci *et al.* 1999) has shown that empirical research largely confirms this crowding out effect, but under specific conditions. Most importantly, the tasks that are incentivized must be interesting and leave room for free choices, the extrinsic motivator should be tangible (such as money) and, finally, the extrinsic reward must be predictable (that is, verbal motivators and unexpected rewards do not crowd out intrinsic motivation). The complex relationship between verbal and tangible rewards implies that in the case of using both together, the crowding out effect may become less salient because verbal rewards enhance motivation. In the economics literature, these psychological insights have been applied in public policy with special emphasis by Bruno Frey (e.g. 1997), who argued that incentives for executives should not be based on pecuniary motivators but on intangible rewards such as formal expressions of social recognition (for example, prestigious awards). However, even in the case of tangible rewards the psychological evidence is complex, because expected rewards can be more or less directly linked to performance, and the mechanisms are also contingent upon the perceptions of the individuals. One firmly established result is that performance-based extrinsic rewards negatively affect the feeling of autonomy and free choice, conveying the perception of external control (this is also suggested by the cognitive evaluation theory in psychology: see Deci *et al.* 1999; for economic versions of similar reasoning, see for example Falk and Kosfeld 2006). Individuals who feel controlled have reduced intrinsic motivation. This is mostly explained by an innate human need for autonomy and recognition of competence, which leads us back to Hegelian premises. Empirical evidence shows that the size of the reward directly and positively correlates with the reduction of intrinsic motivation. Crowding out is highly probable if the size of the extrinsic reward is very high (thus

increasing the relative salience of this motivator) and if the reward belongs to the same category as the object of the individual's intrinsic motivation (James 2005). Then, if we assume that managers are intrinsically motivated to earn money, because this is the aim of doing business, they will actually show reduced intrinsic motivation if they are offered huge pecuniary rewards that are tightly linked to their performance.

6 There are different possible explanations for this effect. For example, we might assume that parents normally have empathetic preferences towards kindergarten staff who cannot leave their duties when parents do not arrive on time, thus suffering in their private lives. However, this feeling of guilt is neutralized when they perceive the fine as a price that compensates for this negative effect, which is reinforced by the generally distancing effects of money that have already been emphasized by Simmel. Similarly, we know, for example, that the academic performance of children may be even jeopardized if pecuniary rewards are given. Again, the introduction of money changes a relationship of duty and obligation into a calculatory relationship wherein children weigh the lost rewards against the benefits of expending less effort on learning. Obviously, in this case the problem is the salience of the pecuniary reward relative to the broader goals of learning: in the extreme case, if individuals start to perceive the reward as the goal of learning, this no longer reflects the long-term benefits of this activity, which is not objectively reflected in the size of the reward. The framing of the social relationship underlying the activity has been highlighted in labour economics by Akerlof's (1982) classical paper on labour contracts as gift-exchange that we referred to in the previous chapter. The labour relation is based on social exchange involving a certain degree of moral autonomy, as the workers are free to decide about this additional effort. In other words, this pattern activates intrinsic motivation, even though the 'gift' is framed in terms of a pecuniary reward, which, however, is not linked to performance.

7 This point is also emphasized by Binmore (2005), as we have seen in Chapter 2. Binmore argues that the experimental economics literature on social preferences is flawed because it does not recognize that individuals will adapt their preferences in a way that equilibria are maintained. Of course, this can imply that in the experimental setting they import those preferences that prevail in their current social interactions beyond the experiment (as empirically demonstrated in the seminal Henrich *et al.* 2005 study which compared the outcomes of ultimatum games across fifteen different small-scale societies). But in these real-world interactions, the same relation between equilibrium selection and preference formation persists which sometimes can also be observed directly in the lab, at least if one considers the series of different experiments in which people who do not manifest generic patterns of behaviour share in larger populations of actors, not to speak of 'humans' in general.

8 There are many contributions to management science that support this observation. They also emphasize the role of leadership and corporate culture in the context of economics, such as Roberts's (2004) theory of the 'modern firm', which provides the practical implications of advanced research in game theory. He sketches a 'high commitment human resource management system' (ibid. 174f.) that features properties such as long-term employment, egalitarianism, self-management, performance pay based on collective performance but not individual performance, and self-management, among others. These systems naturally require strong leadership which relies less on control mechanisms and direct incentivization, and more on moral and professional authority, thus demonstrating a strong ethical dimension (compare Casson 1991: 29ff.). These general approaches are also important in the specific context of managerial compensation schemes, for example, with respect to the contract duration (Sepe 2011). Many executives have a long-term relationship with the company, effectively turning their contracts into relational ones. This means, however, that in the longer run fixed annual compensations become variable, and managers take

the longer run effects of risky projects into consideration. As is well known from game theory, longer time horizons and repeated games foster cooperative behaviour and constrain cheating through many channels, such as reputation effects. Across different industries, the prevalence of relational contracts may differ, such that the optimal compensation schemes may also differ, and may be determined by other factors such as the nature of explicit and implicit technological knowledge in the companies (a systematic approach to this is to consider different degrees of complementarity between the different constituents of production processes across different industries: see Milgrom and Roberts 1990; Kremer 1993).

9 Klaes (2001) envisions a fascinating perspective on the history of economics, drawing on the project of Reinhart Koselleck's 'history of concepts' (*Begriffsgeschichte*) and on the social-constructivist approach in the philosophy of science associated with Barry Barnes and David Bloor. To deal with concepts as institutions means to see in them the self-referential structures of meaning, whereby naming, defining, describing or contesting certain descriptions has real consequences for institutional reality, since the concepts represent the world in which they appear, motivated by real interests and ways of thinking, and which they continue to influence and stabilize after being introduced. Along with some instructive case studies and the general support of continuity and performativity principles discussed above, this perspective provides the strategy of treating various reinterpretations of concepts as strategic moves happening within the entanglement of interests, cultural identities, intellectual priorities, etc. This approach enables us to take seriously the events of intellectual history and to see the role of the conceptual domain in the process of institutional change. Klaes's example is the concept of transaction costs, but, in fact, many more economic categories (such as human capital, efficiency and the very concept of institution) can be subject to such analyses.

10 An example of an association in this sense is the Business Roundtable in the United States, which is an association of CEOs of larger corporations (see http://businessroundtable.org/about-us/). The Business Roundtable has also published statements on the regulation of executive compensation: see Mastumura and Shin (2005). In other countries, CEO associations are rare because the pertinent social networks are mostly organized in an informal way (such as in the notorious golf clubs); however, these networks do not play an explicit role in public policy. In comparison, formal organizations of executives appear less salient. For example, in Germany there is the Deutsche Manager Verband (www.managerverband.de/Politische-Ziele-41.html), which has relatively little significance in public debate. Industry asssociations appear to be more influential, thus reflecting important differences between the German and US business cultures.

11 For example, for reasons of sheer size and internal heterogeneity, consumer groups would not appear to be mobilized easily in comparison to farmers, a fact which explains the fact that in most countries farmers' lobbies are strong and can press the government to adopt trade policies which imply higher food prices for domestic consumers (for a survey of standard political economy analysis, see Rodrik 1995). Many intricacies of international trade policy can be well understood against this background. For example, the liberalization of agricultural trade will not only benefit developing countries, in spite of improved market access, but also consumers in rich countries in terms of welfare effects, because current agricultural protectionism in developed countries damages consumer interests (Anderson *et al.* 2006). There is even the possibility that some less-developed countries might lose out in terms of welfare, if they are net importers of food, because higher agricultural export prices harm them, in spite of benefitting the majority of agricultural exporters in developing countries.

12 Let us consider one simple example: in a classical paper, Rodrik (1986) compared two different policies to support domestic industries, tariffs and subsidies (there is series of follow-up contributions, such as Pecorino 1998, Mitra 1999 and Magee 2002). As long as the political economy aspect is ignored, trade theory clearly states

that tariffs are less efficient than subsidies to producers, because they directly protect domestic industries from foreign competition, whereas subsidies can target supposed inefficiencies such as externalities of production. Interestingly, in recent decades this assumption has shaped numerous trade policies which initially focused on tariff reductions, and only later turned towards the closer regulation of domestic subsidies. Since subsidies can be justified on many grounds, such as domestic positive externalities of technologies in production, the efficiency case against subsidies is much weaker than against tariffs. However, the picture changes completely once political economy is explicitly included. The question is which institutional regime would create the strongest incentives for lobby groups to mobilize in favour of the institution? Then, subsidies are problematic because they directly flow to single companies within an industry, so companies have individual incentives to mobilize political support. In contrast, tariffs protect the entire industry: this creates a free-rider problem for organizing the industry as an interest group. Therefore, in a politico-economic equilibrium view the tariff appears to be the more efficient institution than the subsidy because it creates weaker incentives for lobbyism. This is desirable, because by implication it might happen that in a fully-fledged political competition, opponents of tariffs might be more successful in mobilizing protest against this policy than opponents of subsidies. Thus, as a result of the endogenization of political economy in positive analysis, we end up overturning the normative propositions of the underlying trade theory. This paradox is further enhanced if we consider that the positive use of political economy analysis actually refers to a process of realization-focused comparisons, whereas the normative evaluation still depends on the transcendental benchmark of equilibrium theory.

13 There are many results in political economy which reflect this paradox following from the inclusion of political competition and its resource use in general politico-economic equilibrium models. These results can be summarized in the notion of 'political transaction costs' (Dixit 1996). If we consider all sorts of trade costs as market transaction costs, the question is whether there is a trade-off between market transaction costs and political transaction costs. If the perfect competition hypothesis is extended into the political domain, that would imply that the barriers to entry for interest groups are the lowest possible ones (generally, see Furubotn 1991, 1998). However, competition over institutions is different from competition in the domain of production because the 'winner takes all' principle applies, which is similar to patent races: different institutions cannot coexist, and only one interest group will prevail. The more intensive the political competition, the larger the share of resources wasted in it through the losses of the losing parties. That being said, perfect competition might imply that no interest group can expect to be the decisive one, which would mean that there are no incentives for mobilizing support. This corresponds to the 'rational ignorance' hypothesis in general political economy, which implies that there are no incentives to collecting and processing the information necessary for determining policy preferences (originating from Downs 1957). So, there are two possible scenarios. In one scenario, any possible gains from more efficient institutions could even be outweighed by the waste in political competition: for example, as long as political transaction costs are blanked out, the balance of diverse political supports can offset each other, such that free trade may obtain; but once political transaction costs are considered, this lowering of market transaction costs does not lead to increases in general welfare (for a related approach to 'black holes' in political economy where welfare gains of institutions are simply devoured by political competition, see Magee *et al.* 1989). In the other scenario, no competition would occur because of the free-rider issue, which implies that policy-makers would not receive any information about the distribution of preferences in society. So, one might conclude that they could set up the 'transcendental' institutions in this case. However, in the standard politico-economic model we cannot assume that they represent society's interests, only their own. So, we end up

with the conclusion that incumbents of power will perceive no constraints in enforcing the institutions that serve their interests: they do not even know which other institutions could be in demand.

14 This way of reasoning is familiar in institutional economics under the heading of the 'hold up' problem and allows expansion of the scope of analysis regarding the different size of countries and the implications for power relations (Yarbrough and Yarbrough 1992; McLaren 1997). Size of countries is related to market size, thus being a determinant of the benefits that exporters can reap from entering trade relationships with this country. Consider circumstances which lead exporters to invest country-specific fixed costs which are sunk after the investment is taken, such as adapting products, setting up distribution channels or building human capital. Then, the specialization dilemma is enhanced because the risks of specialization increase since sunk costs are lost as soon as the liberalization policy is withdrawn. This problem is especially acute in the case of small countries relative to large countries, because they might specialize not only in product terms, but even in country terms, thus becoming dependent upon a larger country. Vice versa, the large country would perceive especially strong incentives to deviate from liberalization commitments. This role of relative size in promoting free trade has been contentious in political economy for a long time, which allows for a stimulating comparison with Hegel's 'Lord and bondsman' analysis and its asymmetries. Large countries with a strong relative power position operate in a complex incentive structure. First, they have to consider terms-of-trade effects of their trade policy because they can directly influence world prices. This means that unilateral liberalization is not necessarily the best policy for them. On the other hand, if they want to secure open market access with other countries, they might be interested in promoting global free trade because they strongly benefit from free markets, given the size and scope of their export sector. This is the assumption in the famous 'hegemonial theory' of trade liberalization (Gilpin 2001: 93ff.; Mansfield 1994). Yet, if we consider exchange of market access rights, precisely if they keep their market access constrained, this can bolster their position of power. In comparison, the case for free trade is most clear-cut for small countries which, however, may refrain from exploiting its opportunities, given their weak position of relative power.

15 Consider, for example, the question how MARs are designed. In the case of a tariff, the right is defined in terms of the tariff rate. If countries exchange MARs, they can measure these tariffs and the value of exports and imports in quantitative terms, such that the value of rights can be evaluated in intersubjective terms. However, if one considers non-tariff dimensions of MARs, this is much more complicated, as in the case of calculating the impact of food safety standards on trade. This complexity is manifest, for example, in the complementarity of services and trade (Hirsch 1989; WTO 2008: 37). All trade transactions require the realization of trade-enabling services. The simplest one is trading as an activity. For example, if the activities of foreign traders are restricted in other countries, this also creates impediments for market access. There is a whole range of trade-enabling transactions (TETs) that should be comprehensively embraced by MARs. For instance, in exporting cars, restrictions on car finance provided by car companies may limit market access. These restrictions are not simple border measures, but involve the whole set of domestic regulations on the services.

16 One puzzle is the growth of anti-dumping procedures. Dumping is a strange policy concept, because in principle it would benefit domestic consumers, and thus would be similar to an export subsidy. Further, dumping is extremely difficult to prove objectively. For example, the theory of reciprocal dumping states that in fact companies charge higher prices for domestic consumers and set competitive prices internationally; thus, although there is gap between the latter and the former, this does not imply that dumping happens in the sense of charging prices below costs. In fact, principles of fairness would actually speak in favour of the export prices and point towards unfair treatment of domestic consumers in the exporting country – quite the opposite

of what anti-dumping policies suggest. How can we explain the prevalence of anti-dumping? A possible explanation is that anti-dumping is in fact a renegotiation measure that responds to the emergence of new constellations in world trade (in the sense of Irwin and O'Rourke 2011), which is reflected in the fact that emerging economies are mostly the targets of these measures, or, recently, that many of these procedures now happen among emerging economies. Then, the fact that anti-dumping happens if prices are perceived to be very low can actually be interpreted as a balance of politico-economic valuations. If prices are very low, this would reflect the strong competitiveness of the exporters. This means that the industry is strong in domestic contexts, so that domestic costs would be relatively small, for example, in terms of unemployment. On the other hand, low prices would certainly be a boon to domestic consumers, yet put pressure on domestic firms. Hence, if the government adopts anti-dumping, it shows that concerns over the latter are very serious, because high costs in terms of consumer interests are incurred. So, anti-dumping conjoins the two aspects: first, it may be a credible mechanism for communicating domestic politico-economic valuations to exporting countries and, second, it may be targeted at industries which do not inflict high politico-economic costs in the exporting countries. There are many episodes in the history of the international trade system which seem to reflect this logic. For example, the voluntary export restraints between Japan and the United States in the 1980s actually did not really change conditions for the American automotive industry because Japanese companies simply started to invest directly in the US. However, the restrictions were directed at an industry which was domestically strong and, further, the investments created employment in the US. The voluntary export restraints can be seen as a renegotiation measure, and not simply as protectionism. After all, as a protectionist device they were a complete failure.

17 Related arguments appear over and again in the mainstream literature, but, to our knowledge, have never been pulled together in a systematic argument. For example, Feenstra and Lewis (1991) argued that in order to make a certain trade policy concern credible, governments would have to credibly signal that they are willing to incur costs in order to achieve their aims. One way is to give a benefit to foreign countries which is costly: we met an example in the voluntary export restraints (see endnote 16) which by implication raise prices on the US market, thus being a cost to domestic parties but actually creating monopolistic conditions for Japanese companies and generating profits for them, in spite of constrained market access.

18 The differences between the US and Europe are less pronounced in two subdomains of GMO – the so-called 'red biotechnology', and GM animals (Vàzquez-Salat *et al.* 2012). In using GMO as pharmaceutical production units and in related indirect uses, both sides converge on a technocratic and science-led approach, with European consumers showing no concerns. Regarding GM animals, both sides emphasize the cultural and environmental aspects, given the shared perception of closer relations between animals and humans.

19 In the US, the product-based approach had already been adopted in 1986, which simply applied the risk assessment procedures from general food and drug safety procedures on GMO, whereas in Europe the need to establish a separate legal framework was perceived, with the first biotechnology laws issues in Denmark in 1986 and Germany in 1990, closely followed by new EU guidelines (Meyer 2012). The US approach meant that the specific production process did not matter in the assessment, as long as this does not create new properties of products, and that only direct impacts upon human health in applying the GMO were considered, as well as possible direct effects upon plants. This US approach is by no means the only scientifically necessary one, because the entire question of possible ecological consequences of GMO has been blanked out. By this approach, GMO were constructed as ordinary 'natural' products, with the same status as new plant varieties produced by other means or new artificial food ingredients produced by synthetic chemistry.

20 The patent laws demonstrate another aspect of this performative structure. The US was also the leading country in allowing for patents on GMO, which vastly enhanced the role of multinational companies in creating and distributing GMO because they could afford the huge investments and the means to protect their patents by both direct controls and legal actions. This is an area where global diversity has started to become more pronounced, because other countries (such as Brazil and China) have adopted an approach to biotechnology that puts stronger emphasis on public research, often planning to create a counterbalance to the market power of US multinationals. The patent system has two far-reaching consequences for the evolving role of GMO in modern societies. The first is that only by patents can biotechnology become an integral part of the business dynamics in financial capitalism, because patents enable the valuation of a biotechnology company's know-how and protect sources of profits. Given the physical nature of GMO, without patent protection, 'copying' would be simple and fast, because plants are self-reproducing. Hence, the second consequence implies that patent protection requires tight direct controls of plant use by farmers, thereby constraining their 'natural' freedom in managing crops and seeds.

21 This case is interesting because it represents a political externality. Consider a developing country which is an agricultural exporter to the EU. For companies in that country it might not be feasible to incur the high costs of market entry to the EU in adapting to the regulations by means of business measures. At the same time, the government cannot set up a regulatory regime that allows maintenance of the regulatory difference with the EU by means of labelling and co-existence rules, again, because of the high costs of setting up corresponding agencies and laboratories. Furthermore, even if this were done, the issue of recognition of these procedures by the EU would remain open. There is always the risk that companies would have to run through a duplicated check and approval procedure domestically and on the EU side. Thus, considering the relative costs and benefits, the best strategy for the developing country might be to adopt a GMO-free policy that maintains certain market access in the EU. This is a policy externality, if there is no domestic preference for GMO-free policies. For example, domestic consumers might not have any concerns about GMO and would appreciate lower food prices generated by higher agricultural productivity, and therefore the government might aim at improving and stabilizing the food supply by using GMO.

22 In the first (and, so far, single) panel decision on GMO where the EU was the defendant, the panel took a highly contentious decision, deciding the case on the basis of the Agreement on Sanitary and Phytosanitary Standards (SPS), thus refuting the EU argument that the Agreement on Technical Barriers to trade (TBT) is pertinent (for extensive analyses of this decision, see Perez 2007 and Winham 2009; on the two agreements, see the extensive analyse by Prévost 2005 and Van den Bossche and Appleton 2005). There are substantial differences between the two agreements as far as the role of national cultural divergences is concerned: the TBT allows for much more leeway to justify regulatory differences in terms of moral and cultural peculiarities. In contrast, the SPS prescribes scientific methods of risk assessment, while limiting its scope to issues such as plant diseases and other threats to public health and food safety. In applying the SPS, highly problematic conceptual decisions had to be taken, especially with regard to the treatment of GMO as comparable to plant diseases and invasive alien species (Bonneuil and Levidow 2011). Then, at the point that the general framework for risk assessment applied, the original US approach was vindicated, namely that impediments to GMO trade must be based on scientific judgments and hence a transparent process of approving GMO domestically. However, this criterion only concerns the risk assessment, and not attitudes towards risk. In other words, even if a scientific risk assessment is adopted, this does not harmonize the trade regimes for particular GMO. Correspondingly, once the EU adapted its risk assessment procedures under the EU authorities, the differences in approval patterns could persist. Therefore, the issue of trade barriers is still on the agenda, but so far it cannot be resolved under WTO auspices.

23 Further, and most importantly, the panel adopted a very narrow legal perspective on the risk assessment procedures, relying on scientific judgment only in assessing the appropriateness and quality of the risk assessment procedure, and not the result in terms of judgments about risk. This neutralization of scientific opinion stands in stark contrast with the extent and depth of the inquiries and the advice sought, which is reflected in the sheer size of the reports and the length of the panel procedure. By this approach, the panel tried to avoid elevating the WTO to the status of an organization that might express scientific judgments related to the contents of trade disputes. In particular, this contrasts with the US intention to base trade policy on science. The panel tried to focus its scientific valuations mainly on whether the EU procedures were following scientific standards in collecting enough information in due time. This is a different question from assessing the merits of the precautionary approach in terms of possible scientific dissent, especially at the time when the trade conflict erupted. Yet, as a result of the panel decision, the precautionary approach is not yet binding in international trade policy. Again, if the panel had adopted the TBT as a framework, this issue could have been avoided.

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Index

Page numbers in **bold** denote figures.

accounting 113–14, 116, 120, 122, 125, 138–9, 183, 187–8, 219–20
action 3–5, 8–12, 14–15, 17–21, 23–6, 29, 33, 35n5, 35n6, 37n9, 42, **43**, 45–6, 48–54, 56, 59, 61–2, 64–6, 70–3, 76n2, 82–93, 101–4, 112, 114, 118, 120–3, 126n1–2, 127n3, 129n9, 130n13, 132n17, 133n18, 134n21, 136n29, 141, 144, 146, 150, 152, 154, 157, 159, 160, 166, 173n8–9, 178, 184–5, **190**, 196, 199, 200, 208; collective 37n9, 70, 114, 120
affordance 7, 86, **86**, 104
agent, economic 36, 65, 92–3, 105, 185–7, 220n4
agriculture 208–11, 213, 216
Akerlof, Georg 72, 105, 109, 131, 158, 166, 179, 186–7, 221n6
alienation 22, 26, 48, 63, 77n5, 117, 164
ANT (actor-network theory) 50, 64, 73, 77n6
Aoki, Masahiko 2, 41, 67, 69, 71–4, 82, 94, 108, **122**, 125, 143, 146, 165, 169, 175n18, 189
artefact 2, 14, 41, 44, 50, 64, 69–70, 80n15, 89, 105, 111–12, 115–20, 122–4, 176n20
associations 6–8, 26–9, 31, 38n12, n14, 135n22, 142, 159–63, 168–9, 174n14, 176n22, 189, 191–3, 196, 205, 218, 222n10; managerial 7, 192
authoritarianism 145

'background' 120
Bacon, Francis 76n2
Becker, Gary 13, 19, 36n7, 131n14
behaviourism 53, 127n4
beliefs 18, 74, 143, 145, 173n9, 185, 215
Bildung (cultural formation) 15, 24, 29, 33, 65, 142, 156, 161–2, 165
bimodality 184–5, 207
Binmore, Ken 2, 67–70, 72, 80n16, 81n16, 144, 150, 174n11, 221n7
biotechnology 171n4, 177, 211, 225n18–19, 226n20
business school 189–90

Callon, Michel 2, 17, 50, 56, 78n8, 124
capability 155–7, 159, 174n12
capital 38n13, 169, 176n22, 178, 180–1, 192, 219n1; human 19, 36n7, 131n14, 165, 175n18, 188, 222n9, 224n14; social 3, 20, 63, 169, 176n22
capital market 125, 175, 178, 180, 183, 219n1
categorical imperative 151, 174n11
China 134n22, 135n22, 145, 209, 226n20
civil society 4, 8, 21, 23–32, 35n5, 37n10, 60, 125, 137n30, 142, 152–3, 159–62, 172n6, 173n9, 175n17, 193, 196–7, 203, 215, 218
co-determination 214
cognition 2, 4, 43–4, 50–1, 56, 61, 64–5, 69, 71, 73–5, 78n9, 80n15, 85–9, 93, 103–4, 117, 122–3, 127n4, 128, 130n11–12, 165, 175n18, 184; grounded 50, 85–9, **86**, 103–4, 130n11, 184; social 44, 61, 78n9, 128n6
cognitive science 2–4, 41, 43, 45, 50, 53, 61, 66–7, 82, 84–5
collective intentionality 56, 60, 64, 70, 72–3, 78n10, 79n11–13, 105, 108, 120, 122, 158
communication 37n9, 74, 88–9, 122–3, 127–8, 140, 143, 175n16, 185, 201, 207, 215

company 138n35, 164, 175n19, 178–83, 188–9, 191, 193, 219n1–3, 220n4, 221n8, 226n20; public 138n35
compensation, managerial 180–3, 187, 192–3, 219n1, 221n8
complex systems 11, 41, 92, 129n10
concept 43, 127n3, 129n11, 131n15, 167–8; Hegelian notion of 12, 14, 18, 24, 31, 34n3, 36n8, 76n2, 88
consciousness 13–14, 25, 28, 31, 34n3, 45, 51–2, 55, 59, 66, 76n2, 80n14, 88, 90–1, 94, 127n4, 152, 154, 173n9
constitution 31, 33, 38n14, 49, 58, 170n1, 174n15, 197; international trade 203, 205–7, 214, 218
consumer 7, 25, 29, 32, 38n11, 105, 107, 137n31, 171n3–4, 177, 198, 202, 208, 209, 211–18, 222n11, 224n16, 225n16, 226n21
consumption 25–6, 30, 38n13, 46, 96, 102–7, 109, 132n15, 133n17–18, 137n31; conceptual 103, 132n17
continuity (thesis) 4, 14, 46–50, 47, 53–5, 58–60, 63–4, 66, 69–70, 73, 80n16, 81n16, 82, 87–9, 93, 104, 108, 111, 114–15, 119–20, 125, 137n32, 154, 222n9
contract 23, 26, 56–7, 60, 134n20, 135n23, 164–5, 176n20, 221n6, 222n8; social 67–8, 136n27, 148, 154
cooperation, cooperative behaviour 28, 37n10, 38n12, 67, 72–3, 112, 125, 143–5, 152, 160, 163–5, 176n22, 192, 222n8
corporate governance 165, 175, 179–80, 182–3, 187, 191, 220n4
corporation 6, 7, 10, 14, 25–6, 29, 31, 32, 38n12, 79n12, 142, 161, 164–9, 175n18, 176n19, 179, 181, 182, 187–8, 191–4, 217, 219n2, 222n10
creativity xxii, 25, 42, 43, 44, 53, 54, 65, 80, 93
credit (economic) 113, 118, 139n36, 188
culture 3, 5–8, 16, 41–2, 54, 62, 80n14, 81n16, 83, 92–3, 105–7, 114, 116–17, 119, 125, 134n21, 136n29, 138n34, 154, 167, 168, 170n2, 174n11, 175n18, 192, 194, 211, 221n8, 222n10

Damasio, Antonio 80n14, 112
Davidson, Donald 18, 35n6
Davis, John 2, 9, 36, 40–1, 67–9, 72, 98–100, 130n12, 131n14–15
debt 113–14, 116, 189
De Jouvenel, Bertrand 163
democracy 32, 38n14, 144–5, 155, 162, 175n17
Descartes, René 18
dialectic 4–5, 8, 10, 13, 17–18, 21–4, 31, 34n1, 35n3, 40, 42–3, 45, 49–51, 58, 62, 83, 114–15, 120, 127n4, 136n29, 137n30, 142, 152–3 , 198, 200, 202
dopamine 95, 103–4, 108, 132n17, 133n17
dumping 206, 214, 224n16, 226n16

economics 1–4, 6–11, 13–14, 17–19, 21, 23, 27–8, 30, 33, 34n1, 35n4, 36n7, 37n8, 38n12, 40–7, 52–3, 56, 65, 67–8, 72–3, 75n1, 82–3, 90–4, 96–7, 102–3, 107–8, 112, 115, 117–18, 121, 124–5, 127n5, 129n10, 131n15, 132n16–17, 135n23–4, 137n32, 139n36, 152, 159, 164, 166, 169, 170n2, 173n10, 174n11, 176n20–2, 177–8, 187, 190, 194–6, 212, 220n5, 220n6–8, 222n9; behavioural 3, 9, 40–1, 44, 90–1, 93–4, 99, 108, 132n16, 141, 149, 195, 220n3; experimental 41, 76n1, 94, 96, 103, 143, 146, 221n7; institutional 2, 10, 13, 40, 75n1, 76n1, 92–3, 97, 195–6, 224n14; neoclassical 40, 109, 115
Edelman, Gerald 84, 98, 126n1, 127n6, 128n6
Elias, Norbert 37n9, 163
emotion 49, 52, 97, 110–11, 114–15, 119, 131n15, 133n19, 134n21, 137n32, 149–50, 154, 172n7, 176n21
empathy 68–9, 80n16, 172n7, 174n11, 221n6
entrepreneur 110, 118, 181–3, 219n2–3
estates 6, 28–9, 32, 38n14, 153
ethical life (*Sittlichkeit*) 6–7, 16, 23–32, 34n2, 35n5, 39n15, 61–2, 107, 141–2, 149, 155, 160–1, 164–5, 173n9, 174n11, 176n21, 187, 192, 194, 216, 218
ethics 6–7, 9–11, 22, 61, 76n3, 107, 141, 143, 146, 149, 153, 158, 164, 173n10, 177, 187–8, 215
evolutionary psychology 112, 126n1
exchange (economic) 7, 22, 24, 107, 109, 114, 116–18, 120–2, 135n23–5, 137n30, n32, 138n33; market access rights 200–5, 207, 218, 224n14–15
experiment 3, 40, 68, 94, 103, 108–10, 129n9, 129n11, 130n13, 133n19, 134n20, 144–5, 170n2, 184, 187, 221n7
expressivism 19, 56, 104
externalism 2–5, 35n6, 43, 45, 52, 68,

90–3, **91**, 101–2, 128n8, 129n10, 130n12, 176n20
externality 19, 48, 54, 105, 166, 188–9, 202–5, 213, 226n21
externalization 4, 8, 15, 44, 46, 48, 54, 57, 61, 65–6, 77n5, 101, 116, 136n29

fact (social, institutional) 11, 19, 44, 46, 52, 64–5, 72, 76n1–2, 77n5, 79n11–12, 80n16, 82, 85–8, 93, 97, 106, 115–16, 120, 123–4, 180; brute 64, 123; empirical, neuroscience, physical 11, 13, 41, 44, 51, 64, 93, 97, 127n5; external 42, 82, 85–8, **86**, 90, 92–3, 100, 127n3, 129n10; observer-relative 44, 56, 70, 108
fairness 7, 27, 38n14, 68, 138n33, n35, 139n35, 171n3, 177, 188, 192, 206–7, 224n16
family 29–31, 60, 134n22, 136n29, 138n35, 139n35, 149–50, 159–60, 166–8, 176n21
family business 138n35, 139n35
fellow-feeling 149–50, 172n7
Ferguson, Adam 22
Fichte, Johann-Gottlieb 12, 22, 27, 59
financial capitalism 6, 125, 178, 187, 220n4, 226n20
Foucault, Michel 163
frames, framing 94–7, 130n13, 170n2, 184, 221n6
freedom 12, 14–16, 20, 23–4, 30–3, 35n5, 41–6, 52, 56, 58–63, 73, 77n4, 80n13, 93, 97, 98, 106, 117, 132n16, 141–2, 155–69, **157**, 173n9–10, 176n21–2, 177, 200, 202–3, 215–16, 226n20; individual 7–8, 27, 30–1, 65, 93, 106, 117, 132n16, 142, 148, 157, 170n1, 172n6, 175n17, 195, 202; moral 157–9, 161–2, 166, 173n9, 219; personal 37n10, 148, 157–60, 162, 164, 166–7, 176n21, 195, 218; social 157, 159, 162, 164, 169, 218–19
Fukuyama, Francis 31, 38n12, 169n1, 170n1
functioning 155–7, 161–2, 167

gambling 110–11, 130n11, 135n23, 215
game theory 2, 40, 67–9, 72, 74, 75n1, 80n15, 128n8, 135n24, 146, 150, 170n2, 221n8, 222n8; evolutionary 72, 128n8, 135n24
Geisteswissenschaften 93
gender 14, 52, 70, 78n8, 100, 166–7, 175n19, 176n19
general equilibrium 195
genetically modified organisms (GMO) 7, 171n4, 208–18, 225n18–19, 226n20–2
Germany 22, 28, 34n1, 181, 192, 211, 222n10, 225n19
Glimcher, Paul 9, 91, 93, 95–7, 99, 104, 108–9, 114, 127n5, 129n10, 130n13, 131n14
Goffman, Irving 37n9

Habermas, Juergen 153
Hayek, Friedrich von 33, 38n14, 41–2, 83–4, 87–8, 126n1–2, 130n12
hermeneutics 76n3, 91
homo oeconomicus 9

'I-mode' 120–2, 124, 139n37, 140n37
idea 1–8, 11–13, 15–16, 19–22, 24, 28, 31–3, 34n3, 36n7, 37n9–10, 40–2, 45, 47–51, 53–60, 62–4, 66, 69, 72, 74, 76n2, 77n6, 78n8, 80n14, 82, 88–90, 94, 101–3, 106, 108–10, 114–15, 117–19, 121, 124–5, 126n1, 127n4, 128n6, n8, 129n9, 131n14, 136n29, 137n31, 138n33, 142–3, 145–6, 149, 151, 155–6, 159, 161, 166, 168–9, 170n1, 172n4, n6, 173n10, 177–8, 180, 190–1, 195–7, 203, 207, 218
identity, personal 100, 105–6, 132n15, 141, 161
imitation 61, 86–9, 104, 122, 131n14, 174n13, 189
impartial spectator 6, 151, 158, 173n8, 174n11, 206
impartiality 147–8, 208
incentive system 6, 164, 177–9, 183–94, **185**, **193**, 220n4
individualism 8, 21, 30, 32, 52, 63, 80n13, 83, 90–2, 101, 126n1, 170n2, 204; methodological 4, 19–20, 40, 75, 92, 121
institution 1–8, 10–11, 13, 15–16, 18, 20–1, 26–7, 29–33, 40–6, 50, 52, 54–6, 59–67, 69, 71–2, 74–5, 75n1, 76n1, 78n8, n10, 79n10–12, 82–3, 88, 92–4, 97–8, 101–3, 105, 107–8, 111, 114–15, 117–25, 129n9–10, 130n13, 135n22, 137n30, 137n32, 138n34, 139n37, 140n37, 141–8, 152–4, 156, 160, 162, 164, 166–8, 170n1, 171n2–4, 172n5, 175n18, 176n21, 178, 183–4, 189–91, 194–200, 202–5, 207–8, 211, 217–18, 222n9, 223n12–13, 224n13–14
institutional fact 11, 44, 93, 116

institutionalism 6–7, 57, 93, 146–9, 156, 160, 167, 169, 171n4, 172n5, 198; discursive 146; transcendental 7, 147–9, 156, 160, 167, 169, 172n5, 198
intellectual property rights 125, 207, 209, 210
interest group 7, 161, 176n22, 196, 198, 199, 208, 218, 233
internalism 2, 5, 35n6, 52, 68, 90–4, **91**, 99–101, 128n8, 129n10, 131n14
international relations 196, 200, 202, 210, 218
investor 102, 110, 139n35, 175n18, 179–83, 192, 219n3

Japan 181, 225
Jena 22, 54, 56, 172n6
justice 3, 6, 8, 25, 68, 141, 146–54, 169, 207, 219

Kahneman, Daniel 94, 130n12
Kant, Immanuel 12, 27, 34n3, 58, 88, 136n29, 149, 151, 153–5, 158, 172n6, 173n9–10, 174n11, 197
Koselleck, Reinhart 222n9
Kripke, Samuel 99

laboratory 129, 168
labour 21–7, 35n5, 37n10, 38n13, 77n5, 107, 113, 118, 136n29, 142, 156, 164–5, 168, 175n18, 181, 192, 221n6; division of 22, 24–7, 125, 152, 160–1, 165, 196, 200–1
language 3–4, 19, 30, 35n4, 48, 53–4, 56–7, 60, 65–6, 71, 78n9–10, 79n10, 89, 116, 122, 127n3, 128n8, 161, 169
Latour, Bruno 50, 64, 129n9
learning 18–19, 36n7, 93, 95, 97, 103, 106–7, 126n1, 127n6, 128n6, 130n13, 131n14, 132n16, 161, 221n6
Leont'ev, Alexei 127n4
Lukács, Georg 22, 28, 37n10, 136n29
Luria, Alexander 127n4

macroeconomics 23, 29, 93, 107, 109, 118, 136n29, 139n36
Malthus, Thomas 26
management 164, 168, 176n20, 177–81, 189–90, 192–3, 210, 219n1, 221n8
mappings (brain) 84, 126
market 7, 10–11, 21, 24, 26, 30, 35n5, 59n10, 41, 64–5, 76n1, 79n12, 94, 102–3, 106–10, 113–14, 118, 124–5, 133n19, 135n24, 135n26, 137n30, 138n35, 139n35–6, 142, 151–3, 160, 162, 164–5, 173n8, 174n14, 175n18, 178–89, 191, 195–7, 201–3, 205, 207–10, 214, 219n1, 222n11, 223n13, 224n14–15, 225n17, 226n20–1; financial 110–11, 116, 134n21, 135n23, 178, 191; social network 106–7
market access right 202–7, 210, 218, 224n14–15
marketization 124, 187
Marx, Karl 22, 34n1, 77n5
Marxism 10, 21, 136n29, 142
Mead, George Herbert 37n9
mediation 3, 18, 23–4, 28, 31, 38n14, 47, 58, 61, 144
memory 80, 99, 100, 104, 130n13
Menger, Carl 17, 112–13, 116, 119–21, 124, 139n37
mind 2, 4–5, 8, 13–14, 22, 35n6, 36n6, 41–8, 50–6, 61, 65–7, 76n2–3, 77n4–5, 78n9, 79n11, 80n15, 81n16, 86–8, 90, 126n1, 129n9, 146; extended 2, 43–5, 51, 53
moments (Hegelian) 3, 16, 18, 49–50, 55, 92
monarchy 28, 31–2, 57–8
money 5–6, 42, 61, 64, 79n12, 82, 93, 107–25, **122–3**, 136n28–9, 137n29–32, 138n32, n33, 139n36–7, 140n37, 152, 161, 183–4, 220n5, 221n5–6; origin of 112
morality 6, 15–16, 101, 125, 149–50, 152–5, 158, 172n6–7, 173n9–10, 198, 215–16
Most-Favoured-Nation principle (MFN) 203–6
Motivation, extrinsic 6, 189; intrinsic 186–7, 220n5, 221n5
Müller, Adam 22
Musgrave, Richard 30

narrative 1, 5, 44, 80n14, 100–1, 106, 133n18
naturalism 43–4, 76n3, 174n11
natural law 16, 26, 155
needs 22–6, 30, 59
Neuhouser, Frederick 23, 157
neuroeconomics 2, 9, 41, 44, 52, 75, 82, 88, 94, 119, 127n5, 128n6
neuro-internalism 2, 90
Nietzsche, Friedrich Wilhelm 136n29
non-tariff barriers to trade 201
normativity 17, 49, 141, 169, 194–5
North, Douglass C. 13, 35n5, 40–1, 64, 89, 162, 174n15

Novalis (Friedrich von Hardenberg) 22
nudging 73, 99, 104
Nussbaum, Martha 156
Nuzzo, Angelica 149, 152, 172n6

open access order 174n15
opportunism 164–5, 176n20, 186
owner 60, 138n35, 139n35, 164–5, 178, 180–2, 188, 191–4, 219n2

paradox 30, 36n7, 100, 172n5, 179, 198–200, 202, 218, 223n12–13
Peirce, Charles Sanders xx–xxi, 42, 77n7
performativity 4, 8, 46–7, 54–8, 60, 63, 65–6, 70, 71, 74–5, 78n7, 82, 87, 89–90, 93, 104, 108, 115–16, 118, **122–3**, 125, 142–4, 146, 170n2, 178, 183, 187, 189, **190**, 212, 222n9
Phenomenology of Spirit 4, 13, 15, 25, 45, 55, 59
philosophy of mind 2, 35n6, 36n6, 45, 76n3, 90
Philosophy of Right 4, 6, 16, 19–20, 26–7, 31, 34n2, 44–5, 56–8, 101, 172n6, 173n9
Piaget, Jean 84
Pinkard, Terry 12, 15, 19, 61, 172n6
Pippin, Robert 3, 12–17, 19, 34n3, 49, 56, 58, 60, 64, 102
Polanyi, Karl 124
Popper, Karl 31, 32, 34n1, 35n4, 128n7, 164
power, political 32–3, 38, 114, 124–5, 136n28, 162–3
pragmatism 13, 75
precautionary principle 209
preferences 5, 8, 18–19, 22–3, 30, 32, 63, 67–73, 81–2, 87, 90–1, 93, 98–9, 101–7, 117, 122, 129n10, 131n14–15, 132n15–16, 133n18, 137n31, 141, 143, 171n4, 174n11, 181–5, 198, 200, 206, 208, 210, 213–15, 219n2, 221n6–7, 223n13; empathetic 68–9, 80n16, 174n11, 221n6; endogenous 18, 67, 70; risk 181, 183, 219n2; social 2, 36n7, 63, 68, 143, 184, 221n7; status 105–7; subjective 30, 90–1, 106, 117, 132n16
preferential trading agreement (PTA) 204–5
price 10, 35, 103, 115–18, 133n19, 134n20, 137n31, 138n33, 139n35–6, 173n8, 186, 198, 221n6, 222n11, 224n14, n16, 225n16–17, 226n21
principal-agent 177, 180–2, 190–1, 219n2
prisoner's dilemma 200–1
probability 96, 129n11, 130n13
property rights 27, 108, 125, 165, 207, 209–10
prospect theory 41, 97, 112, 130n12
Proust, Marcel 100
Prussia 31, 39, 163
public discourse 6, 38n14, 65, 155–6, 158–60, 162–3, 165–9, 174n12, 191–2, 194
punishment 62, 114, 144–5, 150, 202

Quante, Michael 15, 23, 32, 48, 173n9

rationality 3, 6, 8–10, 13, 16, 18, 20, 29–30, 33, 36n7, 53, 57–8, 62, 65, 71, 73, 81, 91, 93–4, 101–3, 107, 109–10, 112, 117–21, 124–5, 130n12–13, 132n16, 141–2, 148–9, 155, 157–9, 170n1, 174n13, 179, 185–6, 191, 196, 203, 223n13; bounded 18, 220n3; rational agent 15, 23, 26, 129n10, 139n35, 144, 154, 183; rational choice 8, 99, 119, 121, 129n10, 131n14, 164, 220n3
Rawls, John 142, 162, 164, 173n10, 175n17
realism 22, 34n3, 88; (political science) 9, 38n12, 143, 146
realization-focused comparison 147, 149, 155–6, 167–9, 171n4, 174n12, 194–5, 197–9, 203–4, 206–7
reciprocity 3, 24, 112–14, 120, 122–4, 135n24, 137n32; international trade 203–8, 218
recognition 4–5, 7, 17, 21, 24, 28, 30, 32, 35n5, 37n10, 46, 52, 59–68, 70, 75, 78n9, 79n11–12, 80n16, 81–2, 89, 93, 97–8, 101, 107–8, 116, 119, 121, 125, 129n9, 142, 152, 158–63, 166–7, 169, 170n1, 173n14, 185, 191–2, 194, 200–1, 203–8, 218, 220n5, 226n21
recursive states of play 71–2, 122, 123
reductionism 11, 41, 52–3, 73, 76n2, 80n16, 88, 90–1, 93–4, 127n5
regulation 38, 124–5, 177, 204, 209–14, 222n10, 223n12, 224n15, 226n21
reinforcer 108–9, 111, 134n20, 183; cultural primary 114, 136
representation 2, 6, 13, 38n14, 53, 57, 69–72, 78n10, 80n14–15, 82, 86–7, 94, 96–7, 103, 127n4, 129n11, 130n11, n13, 132n17, 144, 154, 189, 208, 215; public (Aoki) 2, 6, 8, 69–72, 144, 169, 189

reward 95–6, 108–10, 112, 133n19, 134n20, 184, 186, 220n5, 221n5–n6; delayed 108, 133n19
reward prediction error 95, 108
risk 110, 130n11, 135n23, 181–3, 187–8, 191, 209–10, 214–17, 219n2–3, 220n3, 224n14, 226n21–2, 227n23
Robbins, Lionel 47, 141
Roscher, Wilhelm 34n1
Rousseau, Jean-Jacques 77n5
Royce, Josiah 37n9
rule 3, 10, 13, 16, 26–8, 32, 38n14, 42, 49, 53, 55, 62, 64–5, 70, 75n1, 89, 97, 103, 115, 119, 128n8, 130n13, 143–5, 148, 157–8, 163, 173n9, 174n13, 174n15, 176n20, 176n22, 187–9, 191, 197, 205–6, 219n1, 226n21
rule-following 62, 128n8, 173n9

salience 122, 134n20, 221n5–6
Schiller, Friedrich 77n5
science 1–4, 9–10, 14, 17, 21–3, 26, 33, 34n3, 35n4, 38n12, 40–3, 45–7, 50, 52–3, 61, 65–7, 76n2–n3, 82–5, 88, 90, 92–3, 102, 107–8, 127n4, 128n9, 129n9, 132n17, 141, 143, 146, 164, 170n2, 208–9, 213, 215–16, 221n8, 222n9, 225n18, 227n23
Searle, John S. 2, 4, 41, 44, 54, 56, 60, 63–5, 70, 73, 78n8, 78n10, 79n11–12, 93, 105, 108, 119–21, 123n37
selection 68, 122, 126n1, 128n8, 187, 221n7
self 27, 45–6, 54, 61, 80n14, 91
self-interest 26, 29, 32, 181, 201
Sen, Amartya 2, 6, 30, 65, 141, 146–50, 153–7, 159–62, 168–9, 174n12, 187, 194, 198
sensorimotoric circuits 85–7, 127n3
Sensory Order 33, 88
sexuality 111, 134n22
Shannon, Claude 80n15
shareholder 165, 180–2, 188, 191–2
sign 4–6, 53, 57, 71–4, **71**, 77n7, 80n15, 82, 106, 122–3, **123**, 128n8, 143
signal 70, 95, 122, 137n31, 184–5, **185**, 189, 207, 225n17
Simmel, Georg 5, 115–18, 120, 136n29, 137n29, n32, 138n33–4, 139n35, 184, 221n6
Simon, Herbert 41, 130n12
simulation 86, 88, 127n3
Sismondi, Simonde de 26
Smith, Adam 6, 21–2, 26–8, 37n10, 135n24, 147, 149–52, 154, 157–8, 160–1, 172n6–n7, 173n8, 174n11, 195
Smith, Vernon 2, 94, 130n12
somatic marker 112, 120, 122–5, 137n32
spirit 2–6, 11–16, 18, 20, 25, 29, 32–3, 34n2–3, 35n5, 36n6, 42–51, 53–6, 58–63, 65–6, 76n2, 77n5–6, 83, 89, 90, 92–3, 98, 109, 118, 129n9, 130n12, 138n34, 153, 160, 170n1, 203; absolute 2, 14, 43; objective 2–6, 8, 11, 14, 33, 34n2, 44–7, 58, 60–2, 74–5, 89, 92–3, 98, 114, 116, 129n9, 138n34; subjective 2–4, 14, 45, 114
stakeholder 188, 191
state 4–5, 21, 25–6, 28–33, 37n10, 38n11, 38n14–15, 39n15, 60, 136n29, 142, 152, 156, 160–1, 163–4, 169, 172n6, 197, 218
status function 60–1, 63–4, 78n10, 79n11–12, 105, 119–20, 139n37
status quo 132n16, 147, 172n4–5, 199
Steuart, Sir James 21–2, 26, 37n10, 172n6
stock market 178, 219n1
structuralism (in the philosophy of science) 35n4, 102
Sugden, Robert 69, 79n11, 120, 149
sympathy 149–50, 152, 172n6–7, 173n8

tariff 75n1, 171n3, 195, 199, 201–2, 205–8, 222n12, 223n12, 224n14–15
tastes 25, 36n7, 105, 107, 131n14, 213
tax, taxation 113–15
teleology 53, 78n7
theory of mind 78n9, 86
totality 2–3, 6, 8–9, 18, 32–3, 49–50, 55, 77n6, 92, 129n9, 146, 218
trade 2, 7, 27, 75n1, 114, 116, 119, 121, 124, 135n23, 146, 171n3–4, 172n4–5, 177, 192, 194–219, 222n11–12, 223n12–13, 224n14–15, 225n16–17, 226n22, 227n23; international 2, 7, 75n1, 124, 171n3–4, 172n4, 177, 194–8, 200–15, 217–19, 222n11, 225n16, 227n23; free 171n3–4, 172n4–5, 177, 195–203, 206, 208, 217–18, 223n13, 224n14; international negotiations 171n4, 197, 202–6, 211, 218, 225n16
trade policy 7, 171n3–4, 172n4–5, 194–205, 207–9, 212–13, 215, 217–19, 222n11, 223n12, 224n14, 225n17, 227n23
transaction cost 109, 172n5, 205, 208, 222n9, 223n13

trust 63, 113–14, 121, 123–4, 135, 143, 176n22, 201
Tugendhat, Ernst 151
Tuomela, Raimo 78n8, 79n11–13, 108, 115, 120

unilateral liberalization 197, 200–2, 224n14
United States 127, 135n23, 138n35, 155, 175n18, 189, 194, 222n10, 225n16
universal, universalism, universality 6, 9–10, 13, 15–17, 22–5, 28–30, 33, 35n4–5, 38, 38n14, 39, 45–6, 54, 60, 62, 91, 95, 117, 127n3, 142–4, 148–9, 151–6, 159–60, 163, 167–9, 173n8–10, 183, 186, 194, 199–200
utility 5, 8, 11, 16, 36n7, 90–2, 95, 103–5, 109–10, 130n12, 131n14, 133n19, 138n33; expected 130n12, 138n33; marginal 138n33

value (valuation) 1, 4, 6–7, 29, 38n11, 40, 50, 58, 60, 64, 95–7, 103–6, 109–10, 112–13, 115–18, 120, 122–3, 126n2, 127n6, 133n19, 134n20, 135n22, 137n32, 138n35; subjective 95–7, 105, 116–17, 119, 137n31, 138n35, 139n35–6, 142–5, 147–8, 153, 159, 165, 168, 170n2, 171n2, 174n13, 176n19, 177–80, 183, 186, 196, 206, 209, 219n1, 224n15; objective 117–18
Vygotsky, Lev 127n4

Wason Selection Task 136n27
'we-mode' 79n11–12, 121, 161–2
Weber, Max 21, 110, 115, 134n20, 146
Weizsäcker, Carl Christian von 132n16
Williamson, Oliver 164, 189
Wittgenstein, Ludwig 78n10, 80n15, 89, 128n8
work 24–5, 27, 46, 137n31, 160, 164–5, 75n17, 219n1; right to work 24, 27, 160, 175n17
WTO 171n3, 196–7, 200, 204–5, 214–17, 227n15, 226n22, 227n23